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THE TEACHER'S EQUIPMENT FOR WORK IN ENGLISH LITERATURE

Preparation for teaching literature implies, first, an acquaintance with the subject. This means that the teacher must have read the English masterpieces, and have formed opinions about them which he can intelligently announce and which he can illustrate with apt quotation. An extensive acquaintance with literature presupposes a generous opportunity of time and a habit of unremitting application. The opportunity of time is duly provided in our school arrangements. Saturdays and vacations are not meant for idleness, but for mental refreshing and enrichment. The habit of unremitting application is the great desideratum.

The literature teacher must be a perpetual reader. It is astonishing with what rapidity one ranges through the great books when one has caught the movement and the impulse. The books you read soon begin to correlate themselves, and you feel an inspiring sense of unity coming to give character to your acquisitions, so that you become conscious of a dawning perception that English literature is an entity of itself, with perfect interdependence of parts. You come to perceive that you can properly read nothing by itself. The habitual reader finds all difficulties diminishing in the light of his increasing knowledge.

The Elizabethan literature, *e. g.*, seems to the beginner to be almost as hard as Latin, though luckily far less dry. A resolute course in Shakespeare soon sweeps away the greatest obstacles to rapid and secure reading, and leaves you free to add author to author. No one has a true right to teach literature who still imagines that the phrase Elizabethan literature means simply the

aggregate of writings produced at a certain time. And no one who has read a good many of the Elizabethan books can dwell in this delusion. Elizabethan literature is not merely literature of a certain period, but literature of a certain character, capable of demarcation from that which went before and from that which came after. Milton shows us the Elizabethan spirit colored with puritanism; Clarendon shows us the Elizabethan spirit colored with obsequious loyalty. One cannot read somewhat widely in the literature of the sixteenth and seventeenth centuries without perceiving at last the true note of the so-called Elizabethan period; and this perception makes all additional reading easy, and justifies the study of literary history in such works as those of Ten Brink, Taine, Saintsbury, and Gosse.

For he who is to teach English literature absolutely must have more than a text-book knowledge of his subject. He must not have filled his mind with other men's opinions. These, some fine day, he may forget, as one does always with matter gathered for examination. The routine teacher of literature wants a book of criticisms. These you may find him giving out as lessons and hearing recited, justifying himself, if he is nevertheless peculiarly bright, by reference to Mr. Harris's dictum about all knowledge being contained in books and the consequent necessity of ever teaching from a book. But not to enter here any further into the subject of methods of teaching, it is to be insisted on that the teacher is professionally untrained whose knowledge was chiefly got at second hand. The text-book of criticisms and estimates conveys no knowledge. To be able to repeat an utterance about Dryden's services to English prose is not to know anything about Dryden's services to English prose. Only he who has sampled Dryden and the prose of his predecessors and his successors knows what a change in prose style that great poet inaugurated.

The text-book opiate has worked in the pedagogic mind, and genuine enterprise seems asleep. One teacher fancies he must attend some lectures and get new ideas. Another procures a little book and reads a few paragraphs about authors. The lecture and the text-book are simple delusions. The number of persons capable of producing both is now very great. This indirect, or second-hand, knowledge of literary works is a sterile possession, incapable of breeding more knowledge. Only he is a

fecund teacher who genuinely knows that which he professes to know, that is, who knows directly and without mediation. Only he is possessed of seminal power as a teacher of literature who has read in his own time and with his own eyes and his own understanding. It is possible to hear committed matter repeated and to conduct examinations in memorized dicta of books and lectures. But how can a teacher speak with inspiration and encouragement about a writer, a poem, a play, unless his knowledge is at first hand, and he has himself known the thrill of sympathy?

Preëminently the teacher of literature must be a constant reader of the great books. It will not suffice to have read certain masterpieces and then to rest content with that achievement. The teacher must be always reading. His task has no end. If he is to give advice about reading, his own reading must be more than a memory. He must ever remain in touch with the sources of literary delight.

Of modern criticisms and expositions of the older authors the teacher will know how to make wise and fruitful use when he has to some extent himself commanded the field which they profess to explore. You are prepared to read such a book as Jusserand's *Theatre in England* only when you have read a number of old plays. To read Beljame's essays on the Eighteenth Century in English Literature you have no right at all until you have read well into Dryden, Addison, and Pope. The current magazines abound in expository criticisms of the older writers. With these criticisms you have no concern unless you also have come into contact with the older writers whom the modern essayists profess to elucidate. There is a certain amount of really important modern writing devoted to the older literature. It is not right to recommend that good modern critical work be neglected. To see how our acutest contemporaries look upon the venerable names is naturally most interesting. It must be remembered, however, that the time to peruse modern writing about ancient writers is only when one has earned the right to this luxury by reading the ancient writers themselves.

Reading is usually considered a pastime by those accustomed to read only current fiction. Often enough we read merely to beguile the time. But the intending teacher of literature must make his reading a serious study, and devote to it such laborious

evenings as the zealous microscopist devotes to his instrument. The reader of a modern novel may read in bed. He who makes his reading a study must put himself in a posture of work. He must be ever ready to lift up great dictionaries and encyclopædias, turn the leaves of many books, search for related matters, meditate on difficulties. Above all, he must keep his pen going, and must accumulate his own queries, his own commentaries. Whether you keep a cash account or not, you must, as a student of literature, keep a literary diary. To-day you begin Hudibras, and find out how to pronounce the name; you have to look up such and such references and allusions; being fresh from Comus, you are shocked by this dreadful immorality and irreverence; you consider wherein consists the peculiar metric effect of Hudibras; you seek to write down the reason why its movement is so queer as compared with that of L'Allegro or that of the Lady of the Lake; you note the vulgarity of the diction; you recognize and excerpt passages of wit and wisdom. In this way you treat much that you read,—all, in fact, that is of great fame in literary history. By perpetually giving free rein to your curiosity you enlarge your knowledge. Moreover, it is only by satisfying curiosity that the curious habit is to be kept active. Simply to put difficulties by and to read on with indolent acquiescence in vagueness of knowledge is to dally with stupidity as with a friend. Cultivate and nurse the habit of curiosity. Cultivate no less the habit of noting down in writing your queries and your discoveries. To put your doubt or your surmise into English good and clear enough to convey your meaning to another person, though you have no intention of taking a partner in your researches, is to make more precise to yourself the boundaries of your knowledge. Reading that is not pure recreation, but is largely study and comparison, inevitably suggests excursions in many directions. The results of these episodic additions to your main task you must record, or run the risk of losing in the medley of miscellaneous shreds and patches of information with which your baggage becomes cluttered as you travel on, and which finally becomes non-existent to you for practical purposes because you have no idea where the particular items are to be found. You must read as if you had ultimately to prepare lectures, adorning them with apt quotation. For though you will hardly be likely, as a secondary teacher, to

be called upon actually to lecture before public bodies on themes of literature, you will find it comforting to be able to appreciate the deliverances of those who have popular platforms at their command; and, what is much more important, you will find that ability to lecture is none too great a power to be possessed by a teacher who has conceived an ambition to make the recitation in literature a genuine incentive to literary study. Of course you will not read lectures in your classes. Leave that to the professors. But the fulness of mind that would qualify you to write lectures you must use in the "seminary" method, provoking questions and answering them in such ways as to keep curiosity alive.

It will be impossible to read English literature intelligently or to teach it effectively without considerable acquaintance with English history. In fact, literature is a perpetual comment on life. History records events and explains the development of institutions. Literature records the thoughts and emotions of men in the presence of these events. The literature of a period is meaningless until we can connect it with the main currents of thought that moved the minds of men in that period. It is useless therefore to try to interest young pupils in literary history. Only so fast as the learner comes to know something of the political and social history of a time, can he begin to understand the springs of literary motives, and see why writers chose such and such themes. Literature is not a separate interest: it does not beget new works out of itself, as if it had a generative faculty and produced new works out of works already existing. Literature grows out of the national life, and its constant endeavor is to picture and criticize this life. Hence a vigorous national consciousness gives birth to a vigorous literature. A feeble literature, without the power to stir minds, and called upon only to furnish amusement, betrays an age devoted to material prosperity, unmoved by great ideas. An age that has perpetually to fight for its civil and political liberties must necessarily have thoughts and emotions very different from those of an age that enjoys its liberty as a matter of course, and cannot quite understand how it is possible to grow enthusiastic over that abstraction. An age that has thrown off an ancient ecclesiastical tyranny has experienced an elation of soul which its successors can never precisely repeat. An age of adventurous voyaging for discovery of new lands has a

stimulus to its imagination which is impossible to an age in which the discoverer's occupation is gone.

Literature therefore must be read as furnishing the key to the spiritual life of its time. The historian of a period must know its whole literature. The student of a literary period must take cognizance of the political and social life of that period. The teacher of literature cannot exempt himself from being also a teacher of history, whether the school arrangements in set terms provide for such an arrangement or not. *Pilgrim's Progress* belongs to literature, but is an epitome of the puritan century. Bunyan was thrown into gaol by the civil power. Milton, Marvell, Clarendon, Waller, writers of literature, were politicians. All Milton's greater poems, from *Comus* to *Samson*, have their political aspects. You will find it difficult to name a writer of any rank whatever, and you certainly will not find a writer of great rank, who was not the creature of his time. If by pure literature you mean literature unrelated to secular matters, you will find pure literature only in sporadic fragments. In literature for its own sake no enterprising generation is greatly interested. The religious lyric, the hymn, may succeed in clothing a perennial human emotion in moving and thrilling forms of verse, so that it shall continue to be sung. But even hymns gradually become antiquated, and are seen to belong, not to all time, but to a by-gone time. Then, ceasing to sing them as expressing rightly our emotions, we embalm them as literature, to be studied as products of their own age. Gray isolated himself from his contemporaries, but made his verse intricate with historical allusion.

With the perspective of literary history the teacher will naturally become more and more familiar as he reads more widely and comes to perceive the interaction of writers and the inheritance of literary influences. The accomplished scholar groups the writers of a given year with due regard for chronological and social facts. There is no dispensing with dates. If you have unfortunately been inoculated with contempt for the memorizing of dates, you must unlearn this prejudice, and proceed to acquire, as a permanent fund of valuable knowledge, some hundred or more of those useful and fundamental elements. The contemporaneity and the succession of writers are asserted by the simple announcement of the years of their birth and death. It is futile to try to

expound a literary period without being able to place together in it the men who actually lived at the time, and to represent them as related thus or thus as regards age and social position. There is no mnemonic device that will serve in lieu of slowly acquired command of detail. There is so much lecturing and magazine writing going on about English literature, that the teacher may be easily tempted to assume the silly role of humility and profess himself content with hearing and reading abler expounders. This is the teacher who knows what belongs to a frippery.

Multitudes of men in every generation express themselves with energy on subjects of general interest; yet very few of these men contribute to literature. Most utterances perish at once. The secret of the vitality and the endurance of certain compositions evidently lies in their form. Without some peculiar grace or vigor of style, some special power of commanding attention, no human deliverance is heeded after its author has passed away. The great writers were, perhaps unconsciously, great artists. That a book two or three hundred years old should still be read with pleasure is a mystery that needs explanation. Why are we so eager to assert the supreme excellence of Shakespeare? What was the art of the men who seem to have written for all time?

While the teacher of literature in a secondary school may well shrink from attempting an exposition of the principles of literary art, he must, nevertheless, have attained to a clear conception of the importance of literary form. He must have cleared his mind of any old prepossessions he may be disposed to cherish in favor of the insignificance of form as compared with substance. In any writing whatever the form counts for a great deal: in impressive writing it is the all-in-all. You cannot escape from the charm of sentiment well expressed; and if the expression be especially neat, you are tempted not to care though the sentiment be odious. If we esteem old literature as the record of the thoughts and emotions of old times, we must remember that this old literature would not now be in existence but for its eminent power to draw and hold attention. The teacher has therefore to consider, not merely what a writer says, but quite as much, and often far more, the way in which he says it. It is necessary to have an eye always on the literary form. To know what are the elements of form, to be able to recognize these elements and explain their ef-

fectiveness in particular passages, is his duty as teacher. Luckily this is a part of his function in which he will not be much misled by the petty annotations with which the text-books are apt to be loaded.

An amorphous work, like the *Excursion* or the *Task*, may command a certain amount of attention by virtue of various pleasing qualities of style, of spiritual elevation, of satiric wit. But only those works which have distinct unity of configuration, which are rounded and finished on an artistic plan, and in which all the details of execution as regards style and diction combine to adorn the entire structure, can claim the rank of literary masterpieces. The Declaration of Independence is a document of supreme interest; its importance depends on its substance: Othello is a document of supreme interest; its importance depends on its form.

The secondary teacher of literature will of course have made a study of poetics. To have read some book on this subject will have been useful only if such reading has prompted him to investigations of his own. His study should be a study of poems, and not a study of theories, definitions, and expositions. It is a dreadful fate to have one's conclusions cast in borrowed moulds. The teacher should think out for himself the several categories under which a poem may be considered, and then should compare many poems, to find in what elements they are alike and in what elements they differ. The term poetry has an immense denotation. To settle precisely what is its meaning in *intension* is very difficult. But something there is which poems the most unlike have in common,—the *Rape of the Lock*, *e. g.*, and the Character of the Happy Warrior. And this something lies deeper than the mere fact that the poems are all written in rhythmic language. If to teach poetics, it were necessary to begin by defining poetry, there would hardly be any beginning of the subject made at all. But the definition of poetry, in a true pedagogic conception of the matter, belongs at the end of the study, rather than at the beginning, and can even then be perfectly well dispensed with. For pedagogic purposes the essential thing is to proceed in full consciousness of the presence of common characteristics and to try to perceive and describe these in many separate instances.

The subject of *metric* is so obvious an element of the general topic of poetics, that it is difficult to understand how it should be so commonly neglected in literature classes. To investigate many poems with especial regard to their metric form is a most interesting employment. The counting of syllables and the location of accents and pauses will be undertaken with avidity by pupils once initiated into the secret of metric regularity. Hence the teacher should have duly equipped himself in advance with a reasonable amount of metric study. The work will be profoundly interesting. Treatises large and small can be found if one feels the need of adventitious help. The best and simplest is the largest, and is in German. This is Schipper's *Englische Metrik*. Schipper quotes an enormous number of passages, and indexes them for reference. But the teacher who is also a student had better proceed in the purely inductive way, by collecting specimens and making comparisons. You find what is nominally the same blank verse in Shakespeare, in Milton, and in Tennyson. But in these three poets the verse produces extremely different effects. Examine the three specimens with the view to understand these differences. Go entirely through Gray, making minute comments on his verse peculiarities. The volumes of Scott and Wordsworth furnish metric specimens in immense variety. Take hold anywhere; you cannot begin in a bad place. Only do not wait for an opportunity to attend a summer school or to hear some professor lecture.

Among his other accomplishments the teacher of literature should be able to read passages of prose or verse in such a way as to elucidate and emphasize their meaning. When an extract has been mangled by careless pupils, the teacher should take it up and render it with its proper expression. A good elocution will stand the teacher in better stead than profound knowledge. Pupils are to be taught in this matter much more by example than by precept. Sometimes a piece first becomes interesting when it is heard well read.

As a student of English literature you have constant occasion to consider matters of pure grammar. Therefore you must be also a student of the English language in its earlier and its later forms. Purely linguistic studies need not continue, however, to occupy your time. It is a pity never even to have looked into

Anglo Saxon, but for a student of modern literature a look is enough. To read Chaucer and Wiclif it is not essential to have Anglo Saxon forms in mind. One had much better give his time to the great writers of the last five centuries. It is desirable, however, that the English grammar that one does study should be genuinely scientific. This condition is emphatically not fulfilled by the books that are most accessible in English. One will not go far astray who limits himself to the books of Morris, Earle, and Sweet.

As a final grace to crown his various accomplishments, the teacher of literature should know how to apply his pedagogic skill to the task of selecting from the great body of English writings those portions which are most suitable as material for study by youth of the different degrees of maturity represented in our schools. He must know what are the simple pieces, good for the youngest, and what are the more exacting, good for those who are stronger. To a pupil who is in earnest to read a good book he must be ready to recommend a really good book, suitable for that special case, the reading of which shall both benefit the pupil and exalt his esteem for his adviser.

S. Thurber

MODERN LANGUAGE TEACHING IN SECONDARY SCHOOLS *

Twenty years ago the modern languages were clamoring for recognition in our school and college programmes. The plea made in their behalf was not always free from extravagance as to the results to be expected from modern language teaching, nor was it always based upon a rational theory of education. It appealed too much to the "practical" instincts of the untrained public, and its claims were often supported by a most unwise polemic against the value of the classical languages in education. In these respects the movement, although conducted with less of

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zealous fury, bore a close resemblance to the onslaught made at the same time by science upon the humanities, in its endeavor to secure a place by their side. Both reforms have triumphed, and, now that the smoke of conflict has in some measure cleared away, we see that it was well that they should have triumphed; that they were rational in essential principle, and that they did not deserve to suffer defeat from the excesses of their advocates. How complete has been the triumph, in the case of the modern languages, may be illustrated by a statement made by Mr. Lowell in his address of four years ago, before the Modern Language association. "It indicates," he said, "a very remarkable, and, I think, wholesome change in our way of looking at things, that I should now be addressing a numerous society composed wholly of men engaged in teaching thoroughly and scientifically the very languages once deemed unworthy to be taught at all, except as a social accomplishment or as a commercial subsidiary. There are now, I believe, as many teachers in that single department of Harvard college as sufficed for the entire undergraduate course when I took my first degree."

Those who have followed, during recent years, the course of modern language instruction in our colleges have seen that department steadily strengthened, its scope made wider and its foundations more secure. And, to come to the special subject of these remarks, our secondary schools have shared in the general upward progress. A large proportion of our high schools now offer full four year courses in French and German, courses parallel with those offered in Latin and Greek. No greater allotment of time or attention than is given the modern languages in these schools could reasonably be asked for. But when we go behind the information provided by the course of study, and inquire into the method and the spirit of modern language instruction in our secondary schools, we shall find, I fear, that the work is not always directed by scientifically competent persons, not always done with strictly educational ends in view. It is even to be feared that we are not everywhere out of the stage illustrated by Mr. Lowell in the following passage from the address already mentioned: "In the latter half of the last century a stray Frenchman was caught now and then, and kept as long as he could endure the baiting of his pupils. After failing as a teacher

of his mother-tongue, he commonly turned dancing-master, a calling which public opinion seems to have put on the same intellectual level with the other." And it is quite certain that many of our secondary schools still linger in the stage of incomplete enlightenment which looks upon a foreign language "as a social accomplishment or as a commercial subsidiary."

The question as to whether a particular school is, in its modern language work, still in the low stage of development thus characterized may best be answered by a statement of the object which that work has in view. The average, unthinking person vaguely fancies that a modern language is studied for the purpose of using it as one uses his own language, in reading, writing, and speaking. This is, undoubtedly, the ultimate aim of the study of a foreign language, but the educator knows that this aim is, in its entirety, far beyond the reach of any secondary school. And since some division of this aim must be made the primary object of the instruction, it is very important to determine what that division should be. And here we come to that great divergence of educated from common opinion which every educator must squarely face, for the popular verdict says that students of a foreign language should learn to speak it, while the educator as emphatically asserts that they should learn to read it, and that it makes little difference whether they learn to speak it or not. It is simply amazing to me, in view of the practical unanimity of professional opinion upon this subject, that our secondary schools should be willing, in this matter, to make to a prejudice based upon ignorance the concessions that many of them do. "We cannot throw too often or too hard in the face of the public the fact that our business is educational," says Professor Calvin Thomas, and we cannot too firmly resist the influences that would have our schools waste their energies upon the impossible task of teaching children to speak foreign languages. Admitting that the thing could be done, it would not be worth doing from the educational point of view, but anyone who reflects upon the conditions that obtain in our large schools, with their large classes, knows that it cannot be done at all. It is easy to impose upon the public with the glib chatter of boys and girls upon a few subjects in which they have been well drilled—and so we have thriving "natural methods," and "systems of practical linguis-

tics" and all the other quackeries with high-sounding titles—but a very slight professional knowledge suffices to show how superficial are the results of all these devices, how utterly they are lacking in educational quality, how far even they are from accomplishing, in any real sense, their ostensible and unimportant purpose.

Let me fortify the opinion thus expressed by quotations from some well-known educators. Professor Thomas says: "You can no more teach a person to speak a foreign language by means of class instruction given at stated intervals, than you can teach him to swim by giving courses of illustrated lectures in a seven by nine bath-room. The thing never has been done, never will be done by the natural method or by any other method; and any one who professes to be able to do it may be safely set down as a quack. * * * The simple truth is that the attainable results in this direction of teaching students in the class-room to speak a foreign language are so insignificant as to be utterly devoid of any practical value whatever, out in the world." Professor Edward S. Joynes expresses with almost equal emphasis his "conviction of the utter worthlessness" of class-room exercises in speaking. "Of course, along with the tongue, the ear must be trained to an accurate pronunciation, and to the appreciation of the beauty and rhythm of the original, for without this there is no language, much less literature. It is important, also, to be able to understand what may be added, for illustration or explanation, in the original tongue. But as for learning to speak in the college class-room, the idea is futile, and all the time devoted thereto is almost utterly wasted." Mr. C. H. Grandgent enters into a mathematical calculation which is in itself a *reductio ad absurdum* of the argument for teaching students to speak foreign languages. He estimates that the individual student will get, perhaps, some six hours of practice altogether during a three years' course. Comparing this with the thousands of hours during which a child must practise his own language in learning to speak it, Mr. Grandgent concludes "that we cannot make speaking our chief aim, and that we must accept this fact once for all, and shape our methods accordingly." As for the desirability, from any standpoint, of learning to speak a foreign language, I will quote from an address by Mr. E. H. Babbitt, who says: "It requires no higher order of

intellect, and no more exercise of the judgment, to speak French or German, than to play the banjo.* * * I am accustomed also to say that both are, for the average American citizen, of about equal importance; but this is only a jocular overstatement of a nevertheless very serious fact."

These quotations might be multiplied indefinitely, and they express the opinion held, with a close approach to unanimity, by the scientific teachers of modern languages in this country. It would be safe to say that they express the opinion of nine-tenths of the members of the Modern Language association. But since this is the case, it may be urged, why take the trouble to state it at such length? Why set up for attack an object which is so evidently a man of straw? For the simple reason that scientific opinion upon the subject has not yet filtered into the popular consciousness; that it has hardly succeeded as yet in directing the work of the secondary schools, controlled as those schools still to a considerable extent are by men who are excellent in the management of business affairs, but far from competent to decide upon strictly educational questions. The pressure that comes from socially ambitious mammas and commercially ambitious papas, desirous that their children shall learn to speak French or German, makes itself felt at many points, and not a few teachers, knowing well enough from experience the hopelessness of the attempt, but yielding to the current delusion, pretend to instruct classes of fifty or sixty in the spoken language, neglecting, in consequence, the real aim towards which their efforts should be bent.

What that aim is need hardly be stated in express terms to an audience like that which I have the honor to address. To open a great literature for the student, to place in his hands a necessary tool of the highest value, to enlighten him concerning the structure of his own language and to give it greater freedom and flexibility within his grasp—these are surely objects beside which the ability to prattle a few commonplace phrases in a strange tongue seems petty indeed.) And these objects are within our reach. A year or two of French, two or three years of German, and the drudgery is over, the stage of pleasurable or profitable employment of the newly-acquired language is reached. How are we to put these preliminary years to their best uses? I would

premise at this point that those uses are substantially identical, whether our students are to continue their work at the university or not. In the former case, the student will at the same time strengthen the philological foundations of his knowledge and use it as a means of research in other directions; in the latter, he will remain content with what elementary philology he has, and secure in one of the most valuable intellectual possessions that a man may claim—one of the few acquirements which, if a man deserve to have them at all, may be retained almost without further effort, certainly without effort of other than a pleasurable and stimulating sort. When the formal results of training in mathematics, in science, and in history, have gone the way of most things learned in the schools, leaving only their educational impress upon the mental structure, the foreign language is retained as a tangible possession, in addition to the intangible power that has come from the labor of accomplishing its mastery.

Passing now to one or two specific points in modern language instruction, I would insist with all the emphasis at my command upon a careful training in pronunciation. Only a superficial view will regard such insistence as paradoxical because coupled, as in this paper, with an almost contemptuous rejection of the opinion that it is educationally important to learn a language for the sake of speaking it. The words of Professor Joynes, already quoted, cover this ground so completely as to leave nothing more to be said. "The ear must be trained to an accurate pronunciation, and to the appreciation of the beauty and rhythm of the original, for without this there is no language, much less literature." I doubt if we are now anywhere as badly off as in the English schools of which Mr. D'Arcy Thompson wrote a generation ago, *a propos* of the current pronunciation of Latin: "I freely acknowledge that the heads of our greatest English schools are boldly self-consistent. They unflinchingly extend their system to modern languages; and I could name more than one flourishing and aristocratic school, where French is taught by an English clergyman with an accent that would set a Parisian *coiffeur* in convulsions; where every *u* is sounded like the *u* in *flute*, and every final *n* is clenched with an honest, Teuton guttural." But we still have schools, and many of them, in which faulty pronunciation is tolerated, and slovenly habits permitted to be formed. Whether it be from defective

hearing, or from lack of the persistent attention which the matter requires, neglect of this prime essential is only too common, and to the student is thereby done a wrong wellnigh irremediable. For it is a far more difficult task to convert a bad pronunciation into a good one than to fix a good one upon a fresh mind. I suppose there is no work that a teacher is ever called upon to do that is so wearisome, so great a tax upon the patience, as the work of teaching pronunciation during the first months. There is only one safe rule to follow—never, under any stress of other things unaccomplished, never permit a mispronounced syllable to pass uncorrected, and that in no vicarious fashion, but by the student himself. It will be slow work, and it will take most of the time for a while; but it is worth doing, and it is done once for all. Pronunciation is the one thing that a student can only get from his teacher—he can get everything else by himself, if need be, from books—and so in this matter the responsibility of the teacher is undivided.

Recent years have done much to obscure the hard and fast line that was formerly drawn, in the study of both ancient and modern languages, between the period devoted to formal grammar and the period devoted to the reading of texts. We begin to read at a much earlier date than we once did, and the change is for the better. Without going to the length of some of the "inductive" systems, and beginning with a text at the very start, I am inclined to think a term, or even less, sufficient for the preliminary study of the forms, and that after this, to quote from Professor Joynes once more, "the further accretion of grammatical knowledge should be made to crystallize gradually around easy, interesting, and pleasurable reading." But there is, after all, a considerable economy in doing the paradigms and the elementary syntax in a lump, and we must be careful how we sacrifice to that fetish of making things agreeable which threatens to play such havoc with elementary education. Education is not amusement, but discipline; we may coat the pill, but must not make it of sugar throughout. Exercises in composition, except for the purpose of fixing the forms, are not desirable in the earlier years; possibly not in the secondary schools at all. And for this very purpose of fixing the forms, a dictation is often quite as useful as composition, besides having the advantage of training the ear at the same time.

Although emancipation from the necessity of translation is the final aim of all modern language study, yet scrupulous attention to translation is necessary in the earlier stages of the work. During the first year or two, every exercise should be as much a contribution to the study of the native as it is to the study of the foreign language. Idiom alone can translate idiom, and, while a literal version may be momentarily taken for a make-shift, no teacher worthy of the name will rest content with the bald rendering first suggested by the halting mental process of the beginner. The idea must be relentlessly tracked to its lair, and must receive its final expression in English as idiomatic as the original. I should hardly blame teachers, as Professor de Sumichrast does, for yielding to "the silly request to know what it means literally," for literal translations of idioms are often highly instructive; but I should blame them for abandoning the analysis, if it be entered into at all, before the psychological process has been completely traced, and its substantial identity in the two languages distinctly shown. Again, those who remain satisfied with imperfect literal renderings are placing the greatest of all possible obstacles in the way that leads to the final goal of language study. When a student is ready to abandon the conscious formulation of English equivalents for what he is reading in French or German, he will find it far easier to slip from these outworn moorings, if he have already accustomed himself to translate thought by thought rather than word by word. If he has clung to the latter method he will find, when the critical period approaches, that the English words he no longer needs are still persistently intrusive upon his consciousness, just as one who has learned singing by *sol-fa* methods can never quite free himself from that ghostly train of syllables which the notes once meant.

My final word is about reading. In the first place, there should be a great deal of it. Begun slowly, it should be continued at a steadily increasing rate; and it is well to supplement the pages prepared for the day's lesson by a rapid translation of further pages, the students following, text in hand. After a while, reading of the original may be substituted for this sight translation, putting only the more difficult passages into English. At the same time, students should be encouraged to do outside reading, and even told that for this work they are not morally bound to

look up every word in the dictionary. If any one who has learned to read a foreign language will interrogate his consciousness, he will find his vocabulary to contain many words that were never learned all at once, words standing for concepts built up by the true organic process, with connotations towards which neither teacher nor lexicon ever contributed. In the second place, reading should be interesting. To the beginner, a bright modern story is a delight, when "Télémaque" or "Nathan der Weise" would be an affliction. We shall come to the classics in due time, but they are out of place when the student still stumbles over simple constructions. Before the course is completed, however, it should be made to include many examples of the best literature, and only good literature should be read at any time. The old-fashioned reader, with its fragmentary exhibit of diverse styles, has fortunately been banished from all enlightened schools. In the third place, the teacher should be absolutely free to choose his texts. No two classes are alike in their needs, and no one but the teacher can possibly know what it is best to read in any given case. Even if there be an adequate reason, which is doubtful, for imposing upon him, by external authority, manuals for class-room instruction, there can be none for prescribing the modern language texts that he shall use. It is the very worst of all bad educational ideals that regards the mechanical uniformity of a system as a mark of excellence. The principle of *Lehrfreiheit* has a meaning for the lower, no less than for the higher, schools. And for all schools alike it means that the best educational results are to be obtained by giving to the teacher the widest possible freedom, by leaving to his individuality the most unfettered possible play, by reducing the influence of systems and methods to the lowest possible minimum.

William Morton Payne

THE REPORT ON SECONDARY SCHOOL STUDIES

At last we have the long expected report of the Committee of Ten appointed at the meeting of the National Educational Association at Saratoga on the 9th of July, 1892. It contains also the reports of the nine conferences (each composed of ten members), which the Committee of Ten organized on the subjects of Latin, Greek, English, other modern languages, mathematics, physics (along with astronomy and chemistry), natural history (biology, including botany, zoölogy and physiology), history (along with civil government and political economy), and geography (physical geography, geology and meteorology). The document is published by the National Bureau of Education. A weightier contribution to the great subject of national education has never before been presented to the American public. To President Eliot, the chairman of the Committee of Ten, all educators must feel, and the editors of this journal desire to express, sincere and profound gratitude.

It is to be hoped that the report will receive much consideration in the pages of *THE SCHOOL REVIEW*. The object of the present brief article is merely to break the ground for subsequent discussion. Now is the time for teachers who reflect upon the aim of their work and the best means of attaining it, and who know by experience the obstacles which in practice arise to thwart and cross them, to set their views before their fellow laborers, to compare them with the recommendations of the Committee of Ten, and to join in the praiseworthy endeavor to improve the secondary education of the country, which, as Commissioner Harris truly asserts, is "the most defective part" of our system. Such contributions will be cordially welcomed by the editors of *THE SCHOOL REVIEW*.

It is impossible within the limits of this introductory article to give an adequate conception of the rich contents of this report; nor is this perhaps necessary, for our readers will surely not fail to procure and read it. The appendix, containing the reports of the nine conferences, covers one hundred and ninety pages of small print, while the report of the Committee of Ten, based upon those reports, occupies fifty-nine pages. In regard to the work

of the conferences (which were made up in almost equal proportions of school and college men who were selected, with due regard to geographical distribution, on the ground of scholarship and experience), it is no exaggeration to say that in everything pertaining to matter, time, place, methods of instruction and examination for the branches of study considered, their reports form an invaluable if not altogether systematic and exhaustive treatise on the science and art of secondary education. I can scarcely conceive any teacher of language, literature, history, science, or mathematics, who would not derive useful suggestions from the report of the conference on his specialty, and the young teacher will find in it the pith and marrow of an applied pedagogy. I recommend the pamphlet with the greatest confidence as a text-book in normal schools and universities which have professorships of education.

Among the eleven questions submitted by the Committee of Ten to the conferences, were the two following concerning the best courses of study for pupils of supposed different destinations:—

“7. Should the subject be treated differently for pupils who are going to college, for those who are going to a scientific school, and for those who, presumably, are going to neither?

8. At what age should this differentiation begin, if any be recommended?”

The conferences unanimously answered the first of these questions in the negative, and the second, therefore, calls for no answer. And the Committee of Ten unanimously agree with the conferences. Though contrary to the general practice of American schools and academies, this conclusion rests on sound pedagogical principles. If there is a suitable age for the beginning of any study, all pupils should begin it at that age; if a certain allotment of time be required for the subject in each year or term, that time should be demanded of all pupils who take it; if there is a best method of instruction and examination, each pupil is entitled to the benefit of it:—and all without any regard whatsoever to the probable course of his future life or the point at which his education is to terminate. It is not of course intended that all pupils should pursue every subject for the same length of time; what is meant, however, is that they shall all be treated alike so long as they do pursue it. The adoption of this principle would lead to a great simplification in the programmes of our sec-

ondary schools and possibly to some reduction in the cost of maintaining them.

Of the remaining nine questions formulated as a guide for the discussion of the conferences, the first three have reference to the time to be allotted to the several subjects in an ideal school programme. The others are as follows:—

"4. What topics, or parts, of the subject may reasonably be covered during the whole course ?

5. What topics, or parts, of the subject may best be reserved for the last four years ?

6. In what form and to what extent should the subject enter into college requirements for admission ? * * * *

9. Can any description be given of the best method of teaching this subject throughout the school course ?

10. Can any description be given of the best mode of testing attainments in this subject at college admission examinations ?

11. * * * * Can the best limit between the preliminary and final examinations [at college entrance] be approximately defined ?"

To the consideration of these questions concerning topics and methods the larger portion of the reports of the conferences is devoted. As the numerous suggestions and recommendations which they make are generally stated with the greatest conciseness, it would be futile to endeavor to give summaries of them within the limits of this article. As I have already indicated, the teacher who wishes to have the latest and best exposition of the science and art of teaching languages, history, mathematics or science must read these reports. While disclaiming any attempt to present abstracts of them, I will venture to call attention to certain important recommendations. For the sake of convenience some recommendations in regard to the time of beginning and the period of continuing the several subjects of study are incorporated here, although they are more properly connected with the first three questions which are still to be considered.

The Latin conference are of opinion that the formal requirements in Latin at present prevailing for admission to representative colleges ought not to be increased in quantity. But the preparation should begin at least a year earlier, and never later than at the age of fourteen. The conference recommend an increase in the work of translation at sight. They also advise greater

variety in the list of authors studied, recommending substitutes for Caesar's Gallic War.

The Greek conference voted to concur with the Latin conference in their recommendations as to the age at which the study of Latin should be begun. They would have Greek begun one year after Latin. The course in Attic prose should, in their opinion, consist of four books of the *Anabasis*, or better two books of the *Anabasis* and, (as an equivalent to the other two) portions of the *Hellenica* and some of the narrative parts of Thucydides. The conference recommend the study of Homer, if the schools give three years to Greek, and suggest that the *Odyssey* be preferred to the *Iliad*.

The English conference hold that the main direct objects of the teaching of English in schools are: (1) to enable the pupil to understand the expressed thoughts of others and to give expression to thoughts of his own, and (2) to cultivate a taste for reading, to give the pupil some acquaintance with good literature, and to furnish him with the means of extending that acquaintance. The conference describe how the subject should be taught from the beginning of the primary school to the close of the high school course. They emphatically assert that the study of literature means the study of the works of good authors, not the study of a manual of literary history. As to composition they hold that every teacher, whatever his department, should feel responsible for the use of good English on the part of his pupils. It is the opinion of the conference that the best results in the teaching of English in high schools cannot be secured without the aid given by the study of some other language, and that Latin and German, by reason of their fuller inflectional system, are especially suited to this end. The conference hold that, when a college or scientific school allows a division of admission requirements into "preliminary" and "final," English should be a "final" subject. The test in entrance English should, in large part, be the student's ability to write English as shown in his examination books on other subjects: the conference doubt the wisdom of requiring set essays.

The conference on other modern languages begin by recommending that an elective course in German or French be introduced into the grammar schools, the introduction to be open to children at about ten years of age. Though Latin may have the

same disciplinary value, living languages seem to the conference better adapted to grammar school work, both on account of the greater ease of teaching and learning them and because of their closer relation to the interests and ideas of to-day. The amount of work to be done in the high school is very considerable; and at the end of the courses pupils are expected to have acquired the ability to translate French or German at sight, to write in French or German, and to follow recitations conducted in French and German and to answer in the same language questions asked by the instructor. It is the opinion of this conference that college requirements for admission should coincide with the high school requirements for graduation.

The conference in mathematics recommend a radical change in the subject of arithmetic, that it be at the same time abridged and enriched. They suggest two improvements in the teaching of it, one, that the instruction be given a more concrete form, the other, that more attention be paid to facility and correctness in work. They recommend that a course of instruction in concrete geometry be furnished by the grammar school, and that it be given during the earlier years, in connection with the regular courses in drawing and modelling. Algebra should be begun at the age of fourteen; demonstrative geometry a year thereafter. One pedagogical maxim may be cited from this philosophical report: "As soon as the student has acquired the art of rigorous demonstration, his work should cease to be merely receptive. He should begin to devise constructions and demonstrations for himself."

The conference on physics, chemistry, and astronomy recommend that the study of simple natural phenomena be introduced into the elementary schools and that this study, so far as practicable, be pursued for at least one period per day by means of experiments carried on by the pupil. They believe that the study of chemistry should in high school work precede by one year the study of physics, and that both should be required for admission to college (which, in their unanimous opinion, should be by means of certificates from approved schools). They advocate the study of one subject as well as possible during the whole year in preference to two or more superficially during the same time. They emphasize their belief that the aim should not be to have the stu-

dent make a so-called re-discovery of the laws of these sciences. They hold that in secondary schools, physics and chemistry should be taught through didactic instruction and by text-book and laboratory work with note-book records. The conference make the explicit declaration that to give good instruction in the sciences requires more work of the teacher than to give good instruction in mathematics, the languages, etc.; and that the sooner this fact is recognized by those who have the management of schools, the better.

The conference on natural history recommend the general comparative morphology of plants and animals as the part of natural history most suitable for study in the secondary and lower schools; and they hold that in the primary and grammar grades there should be a study of gross anatomy, and in the secondary schools a study of minute anatomy and classification. Throughout all the work the aim should be to make the observations and notes of the pupils systematic, clear, and exact. Careful drawings should be insisted on from the beginning. The conference prescribe at least a year's work in natural history for the high school, and insist that it should be required for entrance to college in every course. In regard to method, the conference specify direct observational study with the specimens in the hands of each pupil, and urge that in the work below the high school no text-books should be used.

Of the remaining two conferences the reports are almost as bulky as those of the seven first described. The length and elaborateness of the reports are due to the fact that history and geography are more imperfectly dealt with in the schools than languages and mathematics, that their educative value is not understood, and that this defect and misapprehension can be removed only by an ample exhibition of what ought to be taught, and in what order, and by what method. These reports cannot be abstracted without great injustice.

The conference on history, civil government, and political economy, desire to have this subject studied from the beginning to the end of the school course—primary and secondary—with the exception of political economy. They deem it important that pupils in the grammar schools should know something of the history of other countries as well as their own. As to the best

method of instruction, the essentials, in the opinion of the conference, are trained teachers, good text-books, suggestive recitations, outside reading, written work, topical study, suitable illustrative material, and historical geography. In making their report this conference kept in view not the pupils preparing for college, but the school children, the larger number of whom will not even enter a high school.

The conference on geography present a report more radical by far than any other. They consider the subject in relation to both primary and secondary schools. But geography means for the conference, not only a description of the surface of the earth, but, as the report of the Committee of Ten puts it, "also the elements of botany, zoölogy, astronomy, and meteorology, as well as any other considerations pertaining to commerce, government, and ethnology"—a whole which "would bind together in one sheaf the various gleanings which the pupils would have gathered from widely separated fields." This conference present a minority report in which the writer complains that in the majority report geography has been sacrificed to geology and meteorology. This criticism appears to be just.

So much regarding the selection of topics in each subject, the best methods of instruction and examination, and the most desirable instruments and facilities for the work of the teacher and pupil. On all these matters one can only be thankful for such a valuable collection and collation of expert opinion; and if the reports of some of the conferences seem to imply a forgetfulness of the fact that the period of youth is short, and that there are many subjects to be studied, and that none of them—not even geography and history—can be learned in their entire extent and throughout all the complexity of their manifold ramifications and correlations by children of tender years, it must be remembered that each conference acted separately and, instead of balancing the respective claims of several subjects, strove only to make a strong presentation of the needs and demands of a single subject, which, in some cases, was earnestly believed to be suffering from neglect. Unfortunately, too, the Committee of Ten, though recognizing in set terms the indispensableness of "a comprehensive survey of the comparative claims of many subjects," shrinks from the difficult task of making it; and, as if to justify this fail-

ure, inconsistently suggests that a school may without detriment omit any of the subjects from its programme, provided only that those which are included are taught for the period and in the manner prescribed by the conferences. This leads, however, to the subject of time allotment, which, as it was previously postponed, we now proceed to consider. As has been already hinted, the important matter of the time to be given to each study was brought to the attention of the conferences in the first three of the questions submitted by the Committee of Ten, which read as follows:—

- “1. In the school course of study extending approximately from the age of six years to eighteen years—a course including the periods of both elementary and secondary instruction—at what age should the study which is the subject of the conference be first introduced?
2. After it is introduced, how many hours a week for how many years should be devoted to it?
3. How many hours a week for how many years should be devoted to it during the last four years of the complete course; that is, during the ordinary high school period?”

We must here confine our attention to the answers given to the third question, which alone concerns the high school. Foreseeing this limitation, however, I have endeavored in the preceding abstract of the reports of the conferences to give some indication of the recommendations made in reply to the first question. In general all the conferences desire to have their several subjects taught earlier than they are at the present time, thus pushing a considerable portion of what is now high school work back into the elementary grades. But without recurring to that aspect of the matter which concerns the primary schools, let us look at the demands which, in response to the third question, are made by the various conferences for time allotment in the four years' course of the high school. This distribution of time among the different subjects of study is exhibited in the following table, which the Committee of Ten proposed on the basis of the recommendations of the conferences. A few minor changes were made by the committee; but with that exception the table is only a correlation and adjustment of the recommendations of the con-

ferences. The abbreviation "p." stands for a recitation period of 40-45 minutes; and the figure preceding it indicates the number of weekly periods assigned to the subject so designated. Supposing then, the recommendations of the conferences were carried out, the resultant programme for a secondary school would be as follows:

TABLE III

1ST SECONDARY SCHOOL YEAR.		2ND SECONDARY SCHOOL YEAR.	
Latin	5p	Latin	4p
English { Literature 2p Composition 2p }	4p	Greek.....	5p
German (or French)	5p	English { Literature 2p Composition 2p }	4p
Algebra	4p	German, continued.....	4p
History of Italy, Spain, and France	3p	French, begun	5p
Applied Geography [European political-continen-tal and oceanic flora and fauna]	4p	Algebra* 2p }	4p
	25p	Geometry 2p }	4p
		Botany or Zoölogy.....	4p
		English History to 1688	3p
			33p
* Option of book-keeping and com-mercial arithmetic.			
3D SECONDARY SCHOOL YEAR.		4TH SECONDARY SCHOOL YEAR.	
Latin	4p	Latin	4p
Greek.....	4p	Greek.....	4p
English { Literature 2p Composition 1p }	4p	English { Literature 2p Composition 1p Grammar 1p } ..	4p
Rhetoric..... 1p		German.....	4p
German.....	4p	French.....	4p
French.....	4p	Trigonometry }	
Algebra* 2p }		Higher Algebra }	2p
Geometry 2p }	4p	Chemistry	4p
Physics	4p	History (intensive) and Civil Government	3p
History, English and Ameri-can	3p	Geology or Physiography, 4p. 1st $\frac{1}{2}$ yr.	
Astronomy 3p 1st $\frac{1}{2}$ yr. } ..	3p	Anatomy, Physiology, and Hygiene, 4p. 2nd $\frac{1}{2}$ yr. } ..	4p
Meteorology 3p 2nd $\frac{1}{2}$ yr. } ..			
	34p		
* Option of book-keeping and com-mercial arithmetic.			
			33p

But twenty periods a week are considered a maximum number. Every one of the four years, but especially the last three, offers, therefore, more instruction than any one pupil can receive. In this dilemma it would seem to have been incumbent on the Committee of Ten to make that "comprehensive survey of the comparative claims" of the several subjects which they had previously (p. 13) declared requisite in dealing with the matter of time allotment. If they had no intention of essaying so difficult an undertaking, I submit that it was an error in procedure not to have notified the conferences of that fact and asked *their* opinion on the comparative educational value of each subject as compared with every other. That the conferences would have answered the inquiry seems highly probable. [Indeed, the conference on English volunteered the opinion that that subject should in college entrance requirements be valued at about one-sixth of the entire marks attainable in all subjects (and a student very deficient in ability to write good English should not be admitted at all); and the three conferences on physics, natural history, and geography, passed in a combined session, the significant resolution that one-fourth of the whole high school course ought to be devoted to natural science. Here is a declaration of the relative importance of certain subjects. And in the same way there must be a determination of the relative importance of all subjects in the curriculum of secondary schools. Would the claims of the modern languages, for example, have been set so high, had they been measured in a joint conference against the claims of the ancient languages? The Committee of Ten decided, and the wisdom of the decision deepens one's regret at the modesty which restrained them from going farther—that ethics, metaphysics, and some other branches of learning were not essential subjects in the curriculum of the secondary school. They also, I believe, selected the nine subjects which were referred to the conferences. Is it to be supposed that these subjects are all equally important if only they be taken extensively and consecutively enough? This certainly seems to be the conclusion of the committee. They tell us that if twice as much time is given to one subject as to another, the former will have twice the educational value; that different schools may select different sets of subjects, if only those selected are taught in a thorough manner, and that it is not neces-

sary that any school should teach all the subjects or any particular set of them; and, more explicitly, that the nine subjects may be considered of equal rank for the purpose of admission to college or scientific school. No matter what they are, if a pupil has spent four years in studying a few subjects thoroughly, he will, in the opinion of the committee, have attained the universal desideratum of strong and effective mental training.

The Committee of Ten, and some of the conferences as well, have fallen victims to that popular psychology which defines education merely as the training of the mental faculties. As though the materials of instruction were a matter of indifference! This preposterous doctrine would destroy the value of the committee's report; for there are many things in the universe besides the nine subjects referred to the conferences which will serve equally well to train the powers of observation, memory, recording, reasoning, etc. I believe that nothing so develops the faculty of observation as the milliner's business! And how the memory would be strengthened by storing up images of all the rainy days in the year!

No, education is not merely a training of mental powers. It is a process of nutrition. Mind grows by what it feeds on; and, like the physical, the mental organism must have suitable and appropriate nourishment. Intellect, with its so-called powers, is only one function of the mind: feeling and volition are co-present and co-essential. *And these three are one mind.* Now the pre-eminence of literature as educative material is due to the fact that, coming as poetry especially does from the intellectual and emotional depths of creative genius, it awakens, nourishes, and calls into activity, the corresponding potencies of those who are touched by its influence. Furthermore, language is the sole universal in the life of man. Language and literature are not merely liberalizing, they are *humanizing* studies. Through the humanity in them we realize our own individual human capacities. Now the language and literature which best serve this ultimate end of self-realization are our own. Consequently the vernacular is the beginning and end of a liberal education. The Greeks, to whom we owe our ideal of culture, knew no language but their own. But the minds of Greek school boys were steeped in their own noble literature. For our youth too I conceive that the essential and indispensable

element in a generous culture is the English language and literature. But as the very able and instructive report of the English conference states—though it had often been shown before—the best results in the teaching of English in high schools cannot be secured without the aid given by the study of some other language, which, in the opinion of all experts, should be Latin or a modern tongue. This reinforces the humanistic starting point, which is of the utmost importance. I have no doubt that from the vernacular as centre the entire scheme of secondary education, whatever it be, must, and in due time, if we apply ourselves to the problem, will be evolved.

To return to the report before us. The Committee of Ten—excepting President Baker who writes a brief but forcible dissenting opinion—assume that all subjects are of equal educational value, and construct four programmes for the secondary schools, which fulfill the conditions of using all the subjects mentioned in Table III and, in general, to the quantities there prescribed. It is admitted that under existing conditions in the United States, the last two programmes—modern languages and English—must in practice be distinctly inferior to the other two. The tables in full, without further comment, will be found on pages 96 and 97.

The report discusses in the closing pages the relations between the high schools and colleges. Recognizing that the secondary schools do not exist for the purpose of preparing pupils for colleges, and that their programmes therefore must not be constructed with reference to the colleges, the committee nevertheless feel that the colleges and scientific schools should be accessible to pupils who have completed creditably the course of the secondary schools. It is suggested that the colleges might accept for admission any groups of studies taken from the secondary school programme provided they aggregate twenty periods a week and promised, further, that in each year at least four of the subjects presented shall have been pursued at least three periods a week, and that at least three of the subjects shall have been pursued three years or more. This plan is, at any rate, conceived in the right spirit. It opens the college to the graduate of the high school, and yet the high school maintains its independence of the college.

I close, as I began, with an expression of admiration and gratitude for this report. Even if it does not settle the question of the curriculum of the secondary schools, it furnishes much of the material needed for its settlement. But the chief worth of the report lies in other directions, and in these it is simply invaluable.

J. G. Schurman

TABLE IV

Year	CLASSICAL THREE FOREIGN LANGUAGES (one modern).	LATIN-SCIENTIFIC TWO FOREIGN LANGUAGES (one modern).
I	Latin 5p	Latin 5p
	English 4p	English 4p
	Algebra 4p	Algebra 4p
	History 4p	History 4p
	Physical Geography 3p	Physical Geography 3p
		20p
II	Latin 5p	Latin 5p
	English 2p	English 2p
	*German (or French) begun 4p	German (or French) begun 4p
	Geometry 3p	Geometry 3p
	Physics 3p	Physics 3p
	History 3p	Botany or Zoölogy 3p
		20p
III	Latin 4p	Latin 4p
	*Greek 5p	English 3p
	English 3p	German (or French) 4p
	German (or French) 4p	Mathematics { Algebra 2 }
	Mathematics { Algebra 2 } (Geom. 2) 4p	Astronomy $\frac{1}{2}$ yr. and Meteorology $\frac{1}{2}$ yr 3p
		History 2p
		20p
IV	Latin 4p	Latin 4p
	Greek 5p	English { as in Classical 2 }
	English 2p	{ additional 2 }
	German (or French) 3p	German (or French) 3p
	Chemistry 3p	Chemistry 3p
	Trigonometry and Higher Algebra or History 3p	Trigonometry and Higher Algebra or History 3p
		Geology or Physiog. $\frac{1}{2}$ yr. }
		Anatomy, Physiology and Hygiene $\frac{1}{2}$ yr. 3p
		20

* In any school in which Greek can be better taught than a modern language, or in which local public opinion or the history of the school makes it desirable to teach Greek in an ample way, Greek may be substituted for German or French in the second year of the Classical programme.

TABLE IV (Continued)

Year	MODERN LANGUAGES TWO FOREIGN LANGUAGES (both modern).	ENGLISH ONE FOREIGN LANGUAGE (ancient or modern).
I	French (or German) begun..... 5p	Latin, or German, or French 5p
	English..... 4p	English..... 4p
	Algebra..... 4p	Algebra..... 4p
	History..... 4p	History..... 4p
	Physical Geography..... 3p	Physical Geography..... 3p
	20p	20p
II	French (or German)..... 4p	Latin, or German, or French
	English..... 2p	5 or 4p
	German (or French) begun..... 5p	English 3 or 4p
	Geometry..... 3p	Geometry..... 3p
	Physics..... 3p	Physics..... 3p
	Botany or Zoölogy..... 3p	History 3p
	20p	20p
III	French (or German)..... 4p	Latin, or German, or French 4p
	English..... 3p	English { as in others 3 } .. 5P
	German (or French)..... 4p	Mathematics { Algebra 2 }
	Mathematics { Geom. 2 }..... 4p	Mathematics { Geom. 2 } 4p
	Astronomy $\frac{1}{2}$ yr. and Meteorology $\frac{1}{2}$ yr..... 3p	Astronomy $\frac{1}{2}$ yr and Meteorology $\frac{1}{2}$ yr..... 3p
	History 2p	History { As in the Latin-Scientific 2 }
	20p	20p
IV	French (or German)..... 3p	Latin, or German, or French 4p
	English { as in Classical 2 }..... 4p	English { additional 2 } 4p
	German (or French)..... 4p	Chemistry 3p
	Chemistry..... 3p	Trigonometry and Higher Algebra 3p
	Trigonometry and Higher Algebra 3 or History..... 3p	History 3p
	Geology or Physiography $\frac{1}{2}$ yr. and Anatomy, Physiology, and Hygiene $\frac{1}{2}$ yr..... 3p	Geology or Physiography $\frac{1}{2}$ yr. and Anatomy, Physiology and Hygiene $\frac{1}{2}$ yr. 3p
	20p	20p

THE HEAD-MASTERS' ASSOCIATION

The Head-Masters' Association of the United States was formed at a meeting held in the rooms of the Boston Latin school, April 5, 1893. The second meeting was held at New York in Hamilton hall of Columbia college, Thursday and Friday, December 28th and 29th. The attendance was excellent, though unfortunately a number of members were kept away by the grip. Dr. Bancroft, of Philips Andover, presided, and in an exceptionally happy introductory address outlined the progress made in secondary education during the year. The chief work of the first day's meeting centred about the paper of Mr. Collar on "What Recommendations Should be Made to the Colleges?" This subject having been made the special order in the afternoon, the discussion was then long and not very fruitful. Finally the recommendations suggested by Mr. Collar were referred to the Executive committee, with instructions to have them printed and sent to the different members to be carefully considered by them all, and made the basis for the report of a committee of the whole for next year. The members met at Clark's on Twenty-third street for dinner in the evening, after which Dr. Gallagher talked in an inspiriting way on the "Relation of the Head-Master of a Large School to the Public," and Dr. Kershaw read a delightful paper on "Some Old German Schoolmasters." Dr. Keep spoke wisely and well on the "Organization and Conduct of Teachers' Meetings," and Rev. Endicott Peabody presented an inspiring sermon, we had almost said, on "School Patriotism." The evening was altogether delightfully spent. At the Friday morning session the "Programmes for Secondary Schools" suggested by the Committee of Ten, were discussed by Dr. Mackenzie. We refrain from summarizing this discussion, for we are happy to state that Mr. Mackenzie is to contribute more than he then said on the subject to the next number of *THE SCHOOL REVIEW*. The officers elected for next year are C. F. P. Bancroft, president; Robert P. Keep, vice president; Julius Sachs, treasurer; James C. Mackenzie, secretary. These officers with Charles E. Fish, William Kershaw, and Edward G. Coy form the Executive committee.

THE HOLIDAY CONFERENCE OF 1893

The Ninth Annual Conference of the Associated Academic Principals of the State of New York was one of the best attended and most successful meetings in the history of that body. More than two hundred were present and the discussions were for the most part ably conducted and profitable. The first question considered; whether it was desirable that Greek be dropped entirely as a requirement for admission to college, was discussed from various points of view, and while the debate itself was not especially significant, it was perfectly evident that those who favored retaining Greek as a requirement for admission were very largely in the majority. The question was finally referred to a committee consisting of Principals Callahan, Kennedy, and Robinson, who in the afternoon session reported as follows:—

Resolved, That it is the sense of this Conference of the Associated Principals of the State of New York that the colleges should give the A. B. degree to those only who have had the full course in Greek, secondary and collegiate.

Resolved, That classical diplomas of the high schools and academies of the state should be given to those only who have completed the full secondary course in Greek.

The rest of the morning session was given to the question of "Aims and Methods in Teaching English Literature," the discussion of which was opened by Principal Rhodes of Adams.

The topic "Aims and Methods of Teaching U. S. States History" occupied most of the afternoon session and called forth not a little enthusiasm. The question how much and what collateral reading should be adopted in connexion with American history was referred to a committee consisting of Institute Conductor Hendricks, Principal Smith, and Dr. Williams. When this committee gave an informal report at the Thursday morning session, it was voted to continue the committee that they might prepare a list of works for collateral reading, and to publish their report in some educational journal.

The Wednesday evening session was occupied by the discussion of the topic, What changes, if any, should we recommend in the regents' syllabus and the present scheme of regents' examinations?

The discussion was prolonged and animated, and the conference finally recommended that the following scheme be submitted for action at the convocation:

1, A series of four year courses ; 2, a re-arrangement of the correct values of the different subjects ; 3, a revision of the syllabus of second year Latin, these three changes to be based on the report of the committee of ten ; 4, a revision of the syllabus in arithmetic ; 5, the elimination of all matters of law from the subject of civics. That this scheme be printed and distributed to the members of this conference at the earliest possible date.

The committee also reported the following resolutions, which were adopted :

Resolved, That we recommend a distribution of the examination more equally among the days of examination week.

Further, it is recommended that the counts hereafter to be assigned to Caesar be four, to Cicero be three, to Vergil be four, and to plane geometry be four.

Resolved, That we recommend that the classical diploma consist of 60 counts assigned as follows : The same as at present, except the addition of two counts to Caesar, one to Cicero, one to Vergil, one each to Latin and Greek composition, one to geometry, and two to the *Anabasis*.

"How to Teach Geometry," was the chief subject of debate Thursday morning, and was discussed with much animation by Messrs. Wheelock, Smith, Bugbee, Sisson, and others. There followed this a lively discussion on the propriety of marking down a paper in subject matter because of defective English. The majority of the conference were decidedly opposed to the practice and the judgment of the conference was expressed in the following resolution :

Resolved, That it be the sense of this convention that students shall not be marked down in the subject matter in mathematics and sciences, for deficiency in English, but that the pass cards be marked as "deficient in English," and that the students be required to make up such deficiency before receiving the regents' diplomas.

It seemed to be the opinion of all who attended the meeting that the conference showed renewed vitality. The discussions were conducted with greater ability than has been displayed at some of the meetings in the past, and the subjects were of immediate practical interest to most of those present. The deliberations of the conference seem however still to suffer from the extempore character of most of the debates. It surely ought to be possible before the meeting to appoint some one to open the

discussion of the several questions in a formal way. Such an arrangement would result in the presentation of the topics in a much more adequate form and would ensure a fulness of discussion which the present practice often fails to secure.

The following are the officers for next year:

PRESIDENT—Henry White Callahan, of Kingston.

VICE PRESIDENT—John G. Allen, of Rochester.

SECRETARY—S. D. Arms, of Deposit.

EXECUTIVE COMMITTEE—O. B. Rhodes, of Adams; E. G. Frail, of Fairport; B. G. Clapp, of Fulton.

REGENTS' COMMITTEE—O. D. Robinson, of Albany; Rev. J. J. Mullany, of Syracuse; G. H. Ottaway, of Canastota; D. C. Farr, of Glens Falls; and C. H. Thurber, of Colgate.

COMMUNICATIONS

To the Editors of The School Review :

Your editorial strictures on the nominating committee of the Association of Colleges and Preparatory Schools call for some words of explanation; you have drawn certain inferences which are not just to any of the parties concerned. On the nominating committee, appointed by President Taylor, there were two representatives of secondary schools. They found their fellow-members, who were college professors, ready to suggest teachers of secondary schools for a number of the offices, but they preferred to leave the offices for the coming year almost exclusively in the hands of the college-men (the one office you refer to was accepted for a secondary school, so that the principle of representation might be established). Their reasons were as follows: Without any solicitation on the part of secondary schools the college association had in a spirit of the broadest liberality invited secondary schools to join its membership, to enter into its deliberations. It was a great, a decisive step for such an organization to take; at one stroke all that secondary schools could hope for had been voluntarily granted, the privilege of presenting their side of the many questions at issue. The college men had made all the advances; it seemed to the two representatives of

the schools that the college-men should have the fullest opportunity of becoming acquainted with the character of the contributions that secondary teachers could make, before the rather empty assignment of offices should be claimed for them. It was distinctly felt that the distribution of offices on a basis of perfect equality might readily be left for future years to the pre-eminent sense of fairness which has hitherto characterized the advances of the college-men; the main point was that the first joint meeting should prove the wisdom of the new policy inaugurated by the college association; your tribute to the success of this first meeting confirms the general impression that prevailed, and the question of the distribution of honors could well be left to future meetings to settle. Notwithstanding your criticism I cannot but think that the nominating committee acted wisely in its conservative advance.

Julius Sachs

To the Editors of The School Review:

It would seem there are yet colleges within whose preparatory pale such a stimulus to the English teaching is needed as Mr. Adams lately furnished by his lithographed fac-similes of boys' revelations of the way in which they had been prepared in composition for Harvard. We have reason to be concerned about a youth who is fitting for college, and who began his first year in a classical school last September, much interested in the writing of English. Up to Christmas he had been called on to write three compositions. With this number we might do wrong to find fault. But though the boy presented his exercises with perfect punctuality, and had taken infinite pains to write them well, he still waits, as the new year begins, to hear from any one of his three compositions, the first of which is some three months old.

Usually it is considered to be the pupil who has the torpid and indifferent mind, while it is the teacher who seeks to rouse ambitions and inspire motives. In the English of a classical school, however, it seems this relation may be reversed. Here is a zealous boy, with a teacher repressing his zeal. Here is a teacher of composition throwing contempt on composition writing. Perhaps this is the classical method.

One cannot help asking to what end principals and superintendents exist, if under their very eyes such enormities continue undetected. Families rehearse with due comment the story the pupils bring home. But those in authority remain unconcerned, sunk deep in routine, inaccessible to details that should convict their schools of vital unsoundness. Or is this method good enough for boys whose main business is Latin? Within the sphere of Harvard influence English is beginning to take form and substance as a serious study, demanding the same vigorous application that other studies do. English used to be in Latin schools a simulacrum, a ghost, of a study. Outside the Harvard range it seems it may remain such still.

English Teacher

BOOK DEPARTMENT

A full description of the books received, giving size, price, etc., will be found in the list of "Publications Received" in this issue, or, generally, in a preceding issue of the SCHOOL REVIEW.

Number Work in Nature Study. By WILBUR S. JACKMAN, Cook County Normal School, Chicago, Ill.

This book begins with an address to the teacher, in which the author states that the aim of his work is to show how pupils may be taught to secure through mathematical processes, definite, accurate, and useful results in the study of elementary science. He proposes to frame series of problems, the solution of which will indicate underlying law in the different departments of natural science.

The remarks to the teacher are followed by an introduction in which is discussed the "Relation of Arithmetic to Elementary Science."

The introduction of natural science into the elementary schools will necessitate a reorganization of school studies with a view to making a place for science work.

As the subjects at present on the school program are for the most part indispensable, the place for natural science is to be secured only through a correlation, or concentration, of studies, by which a knowledge of certain subjects may be gained through instruction in other subjects.

All studies may be separated into two groups—*thought* studies and *form* studies, the latter of which may be regarded as a means of expressing the former.

The value of thought study, either as a means of development to the thinker, or for any other practical purpose whatever, is directly dependent upon the readiness, completeness, and accuracy with which concepts are formed. The weakest point of the teaching of the present day relates to inaccuracy in the forming of concepts, and, since the function of mathematics is to secure accuracy, hence the necessity for the use of number and arithmetic in connection with science work.

The author refers to the use of mathematics by Kepler, Newton, La Place, and others, and shows that all science must, in a sense, be mathematical.

Adverse criticism is made in regard to the present system of instruction in mathematics, as well as in regard to the careless, desultory work in studies where the mathematical element is lacking. The vagueness and incompleteness of the thinking done

is indicated by such expressions; as, "few," "many," "some," "several," "about," "nearly," "somewhat," "I think," etc. Such work implies a lack of confidence in the knowledge gained, and develops habits of carelessness and inexactness.

The author would have number and arithmetic taught incidentally in connection with the study of natural science, but he is careful to make a distinction between teaching any subject *incidentally* and *accidentally*. The processes of arithmetic must be taught just as thoroughly as when arithmetic occupied a separate place upon the school program.

The plan of study in various departments of natural science is designed by the author to suggest a remedy for the defective instruction indicated in the foregoing discussion. To this end are arranged series of problems in zoölogy, botany, physics, meteorology, astronomy, geography, and mineralogy. The answers to these problems involve the use of number, and arithmetic in integers, fractions, ratio, and percentage. The problems are for the most part arranged logically, and are calculated to lead from the observation of many particulars to the discovery of general truth, *i. e.* of underlying law.

In comment upon the book as a whole, we may say that, at the first glance, it is not prepossessing, but it will repay careful reading. The author has done an important service for the study of the elements of natural science in the elementary schools. Instruction in our schools is defective in general, and in particular; but probably no department of instruction is so defective, and so unscientific, as that of natural science. Very few teachers appear to realize that more is involved in this study than the desultory observation of a few disconnected particulars. Beyond this, a little vague, uncertain work in classification may be attempted occasionally, but, as a rule, nothing is done to afford the pupils a glimpse of even the suggestion of a law.

The author's plan appears practicable for the study of meteorology, astronomy, and some parts of geography. In connection with zoölogy, botany, physics, etc., some difficulty in procuring material for observation, under natural conditions, would probably be experienced. We suspect, however, that the greatest difficulty in managing the book to advantage would be due to lack of proper preparation in the subjects on the part of the teacher^s themselves. There may be teachers in this country, who are properly prepared to conduct the study of natural science in the elementary schools, but, as yet, we have not seen them at work.

We heartily endorse the author's views in regard to the necessity for the mathematical element in all science work, and we believe that a good part of the work he has presented is excellent, but we do not see that he has done what he claims; viz., to have taught number or arithmetic through the study of natural science. Num-

ber, as a property of the material object, bears the same relation to the objects studied as do size, form, surface, color, weight, etc. Mathematics is a means of exact concise expression, and is put to its legitimate use in being applied to the expression of the thought gained through observation and inference. This is the use which Kepler, Newton, and La Place made of mathematics. Those men did not gain a knowledge of mathematics through the study of physical phenomena, but having mathematics at their command, they were able to express the results gained accurately and concisely.

We very much doubt whether a knowledge of any so-called *form* subject can be gained through instruction in the *thought* subjects. If any real knowledge of it is to be gained, the form subject must in its turn become a thought subject, and must itself become the object of observation and inference.

The difficulty has been heretofore that the knowledge gained from the study of the form subjects has not been put to its legitimate use, *i. e.*, it has not been applied as a means of expression. The author, in his presentation, affords an excellent opportunity for the application of number and of arithmetical calculation, but we are disposed to believe that arithmetic and botany, for instance, were taught separately by him, even though but one was represented on the program, and though the work in both was done during the period assigned to natural science alone.

In the elementary work, children ought to gain such a knowledge of number as will form a foundation for the philosophical concept that lies at the basis of mathematics as a science, and without which advanced work in the natural sciences is impossible. Without presenting number as in itself a thought subject, we doubt whether this can be done, and for this reason, we doubt the possibility of teaching number through instruction in natural science.

One word in addition concerning the work in natural science. The mathematical work here may be overdone. The purpose of the problems is to aid the pupils in determining the characteristics common to a class of objects. This is of course the basis of classification, and is preparatory to the discovery of law. Since the ultimate aim of science work is the discovery of law, any mathematical calculations which do not further this aim are valueless to science and are to be classed with the problems to be found upon the pages of the ordinary textbook in arithmetic.

Margaret K. Smith

Oswego Normal School

Mental Development in the Child. By W. PREYER. Translated from the German by H. W. BROWN. New York: D. Appleton & Co., 1893. (The International Education Series.)

In the year 1880 Professor Preyer delivered a lecture before the Scientific society of Berlin on *Psychogenesis* or the mental development of the human being during the first years of life. This essay was followed in 1881 by a more exhaustive work from the same author's pen on *The Mind of the Child* (*Die Seele des Kindes*, third edition, 1890). By publishing these books Professor Preyer gave to the science of child psychology the impetus which is leading to such good results. Since the appearance of the last named classic, which is based on the most careful and painstaking investigations, the interest in the subject has steadily grown, so that, at present, the literature of infant psychology is quite considerable and valuable. But there is need of still wider interest and of greater effort in this direction. Additions must be made to the body of facts already possessed. That this end may be reached, the persons nearest and dearest to the child must be initiated into the art of scientifically observing the developing human mind. The original of the little book before us, which Professor Brown has rendered accessible to English readers in a fair translation, was written with such an object in view. In order to enable mothers and others to gather psychological facts of child life, the author presents to the general public the more important results already attained, "in a form as easy of assimilation as possible." In selecting from the large material in his possession, he is guided by considerations of practical use and application. Readers are introduced not only to a theoretical study of the infant soul, they are also supplied with valuable suggestions as to the best means of educating the same. Hence the volume cannot fail to be of service to those upon whom devolves the responsibility of training the young. Of course, it requires mental application to master the contents of a book like Professor Preyer's, especially from persons unacquainted with psychology. But the student will find himself amply repaid for his pains.

Professor Preyer begins with the study of the senses of the new-born child, shows the order in which they develop, and points out the need and the means of training them. Then he considers the feelings, emotions, and temperaments. In a chapter devoted to first perceptions and ideas, the genesis of space and time perception is traced, and the difference between a percept and an idea explained. The origin and growth of the will forms the subject of a subsequent chapter, which is full of excellent hints concerning the education of the will. Hereupon the child's first learning is taken up. "Learning to think consists in understanding the simple elements of the sense-impressions," the child gradually

learns to discriminate between ideas, apprehends similarities, classifies. There can be thinking without language, in fact ideas must precede language. On these points the author strongly insists, adducing what seems to me to be conclusive evidence of his position in a chapter entitled "Intellect Without Language and Language Without Intellect." The author also investigates the manner in which the child learns to speak, and cautions against the bad effects of "baby-talk." In another chapter he shows how higher ideas are formed; he demands that the child first learn to understand his own experiences before being burdened with unintelligible concepts. Chapter IX treats of the development of self-consciousness, chapter X of the conditions of mental development. Throughout the entire volume Professor Preyer strongly emphasizes the need of a physiological pedagogy. "The greatest defect, he says, in our European education at the close of the nineteenth century consists in this: that in the first period of the life of the young there is far too little physiological training, and at a later period far too much unphysiological instruction." *e.g.* (p. 40.) "Two fundamental rules are here to be kept in mind by every mother, by every educator of little children, continually; first, to *spare* the organs of sense and the nervous system; second, to *exercise* them." (p. 162.) "Such a (physiological) pedagogy must work, first of all, among countless hereditary tendencies by means of consistent, suitable selection of auditory and visual impressions; then by all ways of regulating the movements, and later the actions, must work in the direction of developing the useful tendencies, those worthy of development, received from innumerable ancestors, as fully and harmoniously as possible; and on the other hand, those tendencies that are harmful, often directly destructive to the child himself and to the society in which he grows up, must from the beginning be hindered in their development, stifled, as it were, in the germ." (p. 168.)

The book contains, also, besides a serviceable analytical table of contents, a preface (pp. v-xiv) by Dr. Harris, the editor of the International Education Series. However interesting this preface may be to students of philosophy, it seems to me to be out of place in a work chiefly intended for laymen. An introduction should in some way assist the reader for whom the book is designed, it must not throw new obstacles in his path.

Frank Thilly

University of the State of Missouri

The Beginner's Greek Composition. Based mainly upon "Xenophon's Anabasis," Book I. By WILLIAM C. COLLAR, and M. GRANT DANIELL. Boston: Ginn & Co., 1893. pp. viii + 201.

This book contains one hundred short exercises in Greek composition. Each exercise is based upon a short passage of "Xenophon's Anabasis," taken in order, until Book I is completed. The exercises are arranged in groups of fours, three consisting of short sentences for oral translation, and the fourth in each series consisting of a connected passage for written translation based upon the same passage and involving the same grammatical principles as the three preceding ones. Each of the oral exercises presents for especial study several principles of syntax, usually four, with references to the grammar. The student is to find illustrations of these principles in the text and apply them in the sentences. Thus the main features of Greek syntax are brought out and some are referred to several times. A few notes and a few Latin equivalents for Greek phrases are given at the end of each lesson.

The avowed goal of the book is to give the "ability to translate connected English into Greek." And the success which has followed this method thus far bids fair to make it the only method. Its great merit consists not simply in teaching to write Greek, but in being the most economical method for teaching to translate Greek. The great problem here solved is,—how to concentrate the attention of the beginner upon a small amount of text until he has mastered its every detail and still prevent him from becoming a mere machine; and again:—how to teach grammar concretely and not simply in the abstract. In a certain way, too, these exercises form a model translation for the scholar giving him idiomatic English for Greek phrases, and not the least advantage is the marked improvement in the English of the translation presented by the scholar.

The especial excellence of the book before us, as an application of this method, is the purity of its English, and this is no mean merit, especially when we observe the marked lack of it in similar books, and consider the unconscious but powerful influence which it exerts upon the translation of the student. Further, the authors have not forgotten that Greek is a language of particles and connectives, and without thrusting these awkwardly forward or omitting them entirely, as is often done, they have formed such sentences and so connected them that the student must inevitably feel the force and need of particles and connectives.

The illustrations scattered through the book explanatory of Greek words are especially appropriate to the method of the book, and the excellent work of the publisher is to be commended. The book in every way shows those unmistakable marks which

characterize the work of practical teachers. One has only to regret that the exercises are limited to Book I and not continued through at least three Books.

Walter B. Jacobs

Providence High School

Inorganic Chemistry for Beginners. By SIR HENRY ROSCOE, F. R. S., D. C. L., LL. D., M. P., assisted by JOSEPH LUNT, B. Sc. (Vic.) F. C. S. Macmillan & Co., 1893.

The name of Sir Henry Roscoe is a sufficient guarantee, that any work to which it is attached is worthy of careful consideration by all teachers of science.

In a great majority of text-books of chemistry for beginners, the author has merely abridged a larger work, and in order to make it easy or popular, has omitted much that every one who wishes to teach chemistry in the truly scientific way, wishes to preserve. Others in their desire to simplify have attempted to put all their explanations in the text, thus often confusing the student, or encouraging him to commit to memory pages of words.

The little book with the above title is not an abridgement of Roscoe's "Lessons in Elementary Chemistry," but an entirely new work. It is not an exhaustive treatise, but in the language of the preface, is a "work for those beginning the study of the science, in which the elementary principles of chemistry are more fully treated than is the case in the 'Lessons,' whilst the description of the elements and their compounds is restricted to a few well chosen typical examples."

Under Part I the work covers the more important elementary principles of theoretical chemistry (pp. 1-66). Under Part II the principal non-metallic elements and their compounds are discussed (pp. 67-240). There is a short appendix, in which the metrical and common measures are given in comparison.

It is to be regretted that the authors have used the older and commercial names of compounds so generally, instead of the more scientific modern nomenclature.

The work seems admirably adapted to the uses of secondary schools and might be used advantageously in colleges, by those students who do not care to take an extended course in science. It is well written, the statements being clearly and concisely made, and the principles involved well explained by the experiments which compose the greater portion of the text. The book is well illustrated and forms a real addition to the great number of chemical text-books.

J. F. McGregory

Colgate University

Elementary Course of Christian Philosophy, based on the principles of the best scholastic authors; adapted from the French of Brother Louis of Poissy by THE BROTHERS OF THE CHRISTIAN SCHOOLS. New York: P. O'Shea, 45 Warren Street, 1893. pp. xxviii + 538.

This work gives in a brief outline a complete system of philosophy founded on the teachings of Thomas Aquinas and his school. It has the commendation of the highest authorities of the Roman church. The letter of approval sent by Pope Pius IX to the author is given in both Latin and English. A Latin translation of the work has been received with favor in Catholic circles in Italy and Germany, and we believe the English will be found equally acceptable in this country. The subject is treated under three main divisions: Rational Philosophy (logic and theory of knowledge), Real Philosophy (metaphysics), and Moral Philosophy. In a brief appendix to the last division the Catholic conception of the church is stated. The book is especially arranged to be used as a text-book. Each principle or definition is first stated in the most concise form possible in italics, and then followed by a paragraph of illustration, explanation, or demonstration as the case may be. A good teacher will doubtless find this method of arrangement very serviceable; with an incompetent or careless teacher it might encourage verbalism rather than thought in the pupil. Besides its use as a text-book in Catholic schools, the work will be found a convenient source of information concerning the philosophical principles of the Roman church. It will be of service to the general student of philosophy as an introduction to scholastic terminology and thought.

F. C. French

Colgate University

High School Manual of Physics. By DUDLEY G. HAYS, CHARLES D. LOWRY, AUSTIN C. RISHEL, teachers of Physics in the Chicago High Schools. Boston: Ginn & Company, 1893.

The two-fold object of this book as set forth by its authors in the preface is: "First, the teaching of physics by the inductive method, that is the presenting of a logically arranged course of experimental work that shall cover the ground of elementary physics: second, the providing of sufficient laboratory work to meet the entrance requirements of any college in the country." At the close of the preface we are told "It is to be borne in mind that this book is no sense a text-book nor intended to supplant one. It is simply a laboratory manual and may be used with any text." Such purposes thus set forth and limited the book seems admirably to fulfill and its authors deserves special credit for the selection and description of the experiments

grouped under the heads, "Properties of Matter," "Mechanics," "Heat," and "Sound." In many cases questions are asked which the ordinary training school pupil is not likely to answer, but this is by no means a defect. The necessity of taking down full notes on experiments and the need of neatness and order in the records for which blank pages are provided, are kept constantly before the student and forms are given in almost every case for the arrangement of the results obtained in tables. The order of the matter of the book which brings magnetism first is peculiar and the reason given in the preface that "The experiments in magnetism are easy, instructive, and fascinating, thus giving a desirable introduction to the laboratory work," and that "It also gives the teacher time to prepare his laboratory for the more difficult work which comes later" : seem scarcely to hold with sufficient force to warrant this departure particularly if the laboratory work is to be carried on at the same time with work in any of the better known text-books in elementary physics. The separate divisions of the book, however, are not made to depend on each other in a way which forbids the teacher taking them up in any order he prefers. A few of the experiments described could easily be made more exact without additional complication of the apparatus. This is notably true of experiments⁵⁸ on page 74.

The book contains the description of a hundred and thirteen experiments in all and as a whole can be well recommended to training school teachers who are giving laboratory work in physics.

E. F. Nichols

Colgate University

The Ore Deposits of the United States, by JAMES F. KEMP, Professor of Geology in the School of Mines of Columbia College. Scientific Publishing Co., New York.

No book of this sort had appeared in this country for more than a generation. Professor Kemp's contribution is therefore welcome to students of economic geology. The work is also the mark of the larger place which the subject has in our schools, the materials having been gathered during years of teaching at Cornell and Columbia. Part I, occupying 65 pages, gives a short statement of general principles and a scheme of classification based on origin. Part II fills the bulk of the volume, and discusses the character and localities of the several ores, beginning with the iron series, following with copper, lead and its associates, zinc, silver and gold, and the lesser metals. References to the literature are very copious, and make the work highly valuable as a guide to the mass of materials widely scattered in journals and official reports. Paper, type, and illustrations leave little to be desired in the appearance of the book.

Colgate University

Albert P. Brigham

The Science of Education. Translated from the German of Herbart, by MR. AND MRS. FELKIN. With an introduction by OSCAR BROWNING. D. C. Heath & Co.

Herbart has given a new meaning to education. It is not necessary to be a thorough Herbartian to appreciate the great service this philosopher has done to educational thought and especially to the uplifting of educational ideals. The remarkable growth of interest in his educational philosophy is not only one of the most striking but also one of the most significant incidents of the past decade. It is only so recently as this that American scholars have begun to study pedagogy with the zeal and scientific spirit that is characteristic of university students. Naturally many of the best have gone to Germany, which for two centuries has fairly been the centre of pedagogical science, as of almost every other form of learning. While the narrow and flippant may shrug their shoulders at Jena and at those who have been to Jena, thoughtful and earnest educationists have welcomed the light that has come from that source. Nobody wishes to Germanize our education, but we do want the benefit of the best thought and best experiment from all parts of the world. It is encouraging to note that much progress is being made in bringing the best pedagogical thought of Germany within reach of the large body of teachers and friends of education in the United States who are not technical German scholars. That the interest in these writings is sufficient to warrant the venture of translating them is in itself a hopeful sign. The present volume is not a book about Herbart but a book of Herbart's embodying the essentials of his educational philosophy. In the preface Mr. Oscar Browning, surely a good authority, states that the translation, is very good, and he furthermore adds that the biographical introduction by the translators is the best brief account of the life of Herbart with which he is acquainted. The book is issued in an attractive form and it unquestionably ought to belong to everyone with any desire whatever for a pedagogical library.

C. H. Thurber

The First Three Years of Childhood. By BERNARD PEREZ. Edited and translated by ALICE M. CHRISTIE. C. W. Bardeen.

The historian of education in our era will probably characterize the last two or three years as the renaissance of child study. It is Rousseau's great contribution to educational philosophy that he for the first time directed the thought of educators toward the necessity of studying the child. His idea, taken up by Pestalozzi and Froebel, fell into desuetude after a time, largely, perhaps, through the great development of organization in schools. Ques-

tions of systems, organization, plans of study, and so on directed the attention away from the psychology of childhood. Stanley Hall has done this generation in this land the service that Rousseau did for France more than a hundred years ago. Perez's book is classical on the subject. It is hardly necessary to say more. The book is simply indispensable for any one who would interest himself in this fascinating phase of modern educational thought. There is as yet very little literature in this field. This work of Perez and that of Preyer are about all that is easily available.

C. H. Thurber

Bradbury's Academic Geometry. Plane and Solid. Published by Thompson, Brown & Co.

This geometry is a good book covering about the same ground and by very much the same methods as five or six other recent publications on geometry. The suggestions to teachers are right to the point and must prove valuable. The order of development I consider fair. The large amount of independent work I like and it is well graded. Especially commendable are the practical problems. In this respect the book is superior. The theory of limits is poorly treated and as poorly applied. The book can be used with profit and pleasure as a text-book in geometry by any live teacher in this subject.

E. P. Sisson

Colgate Academy

NOTES

Messrs. Ginn & Co. announce for publication in January *An Introduction to the French Authors*, a practical reader for beginners, by Alphonse N. Van Daell; and in February an edition of Riehl's *Burg Neideck*, edited with notes, and introduction by Professor Charles Bundy Wilson, of Iowa State university.

The October number [No. 59] of the Riverside Literature Series, Houghton, Mifflin, & Company, Boston, Chicago, and New York, is entitled *Verse and Prose for Beginners in Reading*. The book is for the Second Reader grade, the contents is mostly poetry and the volume is intended as a companion to *Fable and Folk Stories*, (Nos. 48 and 49 of the Riverside Literature Series), supplying poetry of quality similar to the prose selections given in the earlier book.

Messrs. Heath and Co. also announce a work by ex-Governor and ex-Senator George S. Boutwell, of Massachusetts, entitled *The Constitution of the United States at the End of the First Century*. The main part of the work is embraced in the reprinting of those articles and clauses of the constitution, which have been interpreted by the Supreme court, with an analysis of the leading or controlling cases which illustrate each section or clause.

Messrs. D. C. Heath & Co. send us the announcement of a compilation of English prose and poetry for young folks, entitled *The Heart of Oak Books*. The series has been prepared by Professor Charles Eliot Norton, and Mrs. Kate Stephens, and is to consist of five volumes, carefully graded. The first contains childish rhymes and melodies, old as Ben Jonson and Shakspere. The second includes children's poems, and tales such as "Jack, the Giant-Killer" (from Old Chap-books in Harvard library), "Jack and the Bean Stalk," and many others. In the three remaining volumes are shorter poems, universally accepted as permanent treasures of the language.

Shorthand is not very generally taught in the high schools and academies, the duty of teaching it being relegated to special private schools. When the differentiation of our high schools that Mr. Miller pleads for in the September number of the SCHOOL REVIEW takes place, and when the duty of educating for business, so ably presented by Professor James in his address before the American Bankers' association (See abstract in December SCHOOL REVIEW.) is universally recognized, there is good reason to think that shorthand will be more commonly taught outside of business colleges. These general reflections are suggested by the handsome volume *Interlinear Shorthand*, by F. S. Humphrey, (The Baker & Taylor Co., \$2.50), which is certainly by far the most imposing appearing work on the subject that we have seen. It contains in interlinear form everything of practical value that can be found in the combined textbooks of the Pitman system. The quantity of practice matter is large and the complete list of legislative phrases used by Mr. D. F. Murphy in reporting in the United States senate is a unique and valuable feature. The book is one of great interest to teachers and students of shorthand. It looks toward the simplification and common-sensing of what has belonged to the esoteric mysteries.

Circular of Information, No. 8, 1893, of the bureau of education, is a revision and enlargement of Prof. Francis A. March's pamphlet, published by the bureau in 1881, on "The Spelling Reform." This republication indicates that there is still a small public that takes interest in this ancient question. The question itself seems to have become almost entirely an academic one. Contemporary literature continues to appear in the standard spelling. No one dares to innovate, at least in any noteworthy and conspicuous manner. Still it is pleasing to daily with the

new forms of words, and in private letters to write them down and to see how they look.

To make the beginning of reform as easy as possible, the great philosophical societies of England and America have not only formulated general rules, but have printed a list of common words in the revised spelling. This list appears in the Century Dictionary and in this circular of the bureau of education. Thus it is perfectly easy for any one to carry out the reform in his own writing, provided he will give a little attention to his spelling.

Could the reformed spellings given in this list be imagined as all adopted by the unanimous consent of teachers, no educational problem would be brought appreciably nearer to a solution. The new forms would have to be taught with the same outlay of labor that has always had to be applied to the teaching of the old forms. There would be still a standard of spelling, departure from which would be wrong, just as it is now. The orthographic malcontents are usually found to be dreaming of a utopia where any spelling whatever will be right. But Prof. March, with his ten rules, contemplates no such state of beatitude. We have certain rules and conventions now; then we shall have other rules and conventions.

It is clear that the new rules are more reasonable than are the old customs, which are not reasonable at all, and that the English writing world will to some degree be a gainer if it can once more make the change. The gain will be simply in the slight shortening of words that contain silent letters. Silent letters should of course retire and cease to vex our eyes and our pens. That a word should sound one way to the ear and appear another way to the eye, is a sort of hypocrisy, which every right-minded speaker and writer of English will naturally contribute his mite to help put down.

A teacher experienced in the reading of juvenile compositions will not find in the new forms of words any consolation for youthful blunderers in spelling. *Believe* and *receive* lose their final *e*, but remain inwardly as they were. *Accommodate* also loses its *e*, but keeps all its *m's* and *c's*. *Occurred* we are delighted to find reduced to *occurd*, but we never knew a pupil to spell it thus, though we have seen it scores of times *occured*.

Teachers may, for the promotion of the spelling reform, at least do as much as this: they may put the rules here formulated in the hands of their older pupils, and encourage them to conform to these rules in their writing. Nor should these pupils be required to be absolutely consistent throughout any given exercise. The difficulty of changing one's spelling is enormous, and it will always seem safer to spell in accordance with the body of the dictionary than according to an appendix. But the coming generation may certainly learn what the new ideas as to spelling are, and have an opportunity to become familiar with the reform, so as never to be disconcerted by what to the uneducated appear merely monstrous and ridiculous shapes of words.

CURRENT EDUCATIONAL LITERATURE

In Defence of Classical Study. By PROFESSOR JEBB. Eclectic, January, 1894.

The spirit which the classics embody now animates the higher literature of the country to a greater extent than at any previous time in the history of English letters. Moreover an intelligent interest in the great masterpieces of ancient literature and art is far more widely diffused than it ever was before in England. The process by which this has been effected may be briefly traced. In the latter part of the eighteenth century the distinctive qualities of the old Greek genius began to be appreciated: this was due chiefly to Lessing and Winckelmann in art, to Goethe and Schiller in literature. Meanwhile Romanticism had arisen, of which Scott remains the most signal embodiment in our literature, as contrasted with the classical tendency. Then came Byron identified, in his last years, with Greece, and masterly in his description of its natural beauties, but not in harmony with the mind of its ancient people. Shelley was keenly alive to the beauty of Greek literature. Keats was in much Greek by instinct, though his style was usually less classical than romantic. Landor in his prose is a conscious artist working in the spirit of the classical masters. But these men appealed only to a few. Carlyle is anti-classical. Macaulay, with his intimate knowledge of the classics, his ardent love of them, does not exhibit the qualities and charms which are distinctive of the best classical prose. John Henry Newman exhibits them in an eminent degree, reminding us that for their happy manifestation a certain spiritual element is requisite, a certain tone of the whole mind and character.

A new current set in soon after the middle of the century, when a more living interest in classical antiquity began to be felt by the cultivated portion of the English public. This became perceptible first in history. Grote invested ancient Greece with a modern interest, and the good work was carried on by Mr. Freeman, who ever insisted on the unity of history. Among purely literary forces tending to create a more appreciative sympathy with classical literature, the foremost place must be given Tennyson: his influence is not only direct in his poems on classical themes, but it operates generally by his artistic perfection of form, which is always, in spirit, classical. Second only to Tennyson is Matthew Arnold who wrought for Hellenism in two ways; by example in his own exquisite poetry; and by precept, as in his lectures on translating Homer, and generally in his critical essays, and in "Culture and Anarchy." Browning's normal style is far from classical; but his work has one element of kinship with the Greek; by an intense vitality it is always a voice of life. The late J. A. Symonds and Professor Sellar have tended to popularize, without vulgarizing, the classics. We have a number of good

translations; in the forefront of which stands that beautiful work through which Professor Jowett has made Plato an English classic.

Thus Greek and Latin studies have been brought more and more into the current of intellectual interests. No less significant is the change in English appreciation of classical art which special causes have favored: excavations in Hellenic lands, increased facilities of travel, the establishment at Athens of permanent centres of research. Within the last fifty years there has been great progress in the comparative method, in the study of manuscripts, in textual criticism, in archaeology. There is danger lest under high specializing the larger view of the humanities be lost. Classical studies are now, on the whole, more efficient in England than they ever were; more in touch with the literary and artistic interests of the day.

The classics will keep their place in our system of liberal education, because their true claims are now more generally understood. Modern civilization is interwoven with the ancient civilizations of Greece and Rome. The Greek mind was the great originating mind of Europe. As Re..an says, "Progress will eternally consist in developing what Greece conceived." This constitutes the historical claim of the classics. On literary grounds their claim is two-fold; first their intrinsic beauty, and their unexpected wealth of suggestive thought. Secondly, directly or indirectly they have moulded, or helped to inspire almost all the best writing of the modern world. Thirdly, the linguistic claim, Latin and Greek are of cardinal importance for the study of comparative philology and general grammar. As instruments of mental training they have the advantage of a structure organically distinct from the modern. The epithet "dead" suggests one of their chief recommendations. In a modern language, living authority can decide questions of usage or idiom; Greek and Latin make a more exacting demand on the learner's nicety of judgment. It is good to have in our literary education one large subject rich in problems which excite curiosity, but do not admit of any certain solution. "Probability," as Bishop Butler says, "is the very guide of life"; and for probable reasoning, as distinguished from demonstrative, it would be hard to find a more varied field than is afforded by the classics. It is no new question, how best to combine *education*, the bringing out of the faculties, with *instruction*, the imparting of valuable knowledge. Modern life tends to insist first upon instruction. Classical studies serve to inform the mind, to mould and train it; but they also instruct; and the usages of the knowledge which they give are manifold.

On this same subject Dr. Harris says, among other suggestive thoughts, in his article on "The Report of the Committee of Ten" in the *Educational Review* for January, 1894: "Latin and Greek are not dead languages. Nor were they ever eventually more useful in a liberal education than now. * * * A youth equipped with Latin and Greek has powers of learning and understanding whatever relates to the social, political, and legal forms and usages of his people, that give him a distinct

advantage over the youth educated only in the 'moderns.' * * * I have long since abandoned my objections to the traditional education of Latin and Greek in colleges and academies."

O. B. Rhodes

A Plan to Free the Schools from Politics. By DR. J. M. RICE. The Forum, December, 1893.

Our public school system is without a foundation. There are as many school systems as there are cities, towns, and country districts. The ideal system does not lie in absolute local control. The standard on the whole is low because the system is under political control. Some of our city schools are among the best in the world. But the uncertainty of political control is a constant menace. Absolute local authority as an ideal has as many disadvantages as it has favorable considerations. It affords as much opportunity to plunder the schools as it does to raise the standard.

Nor does the ideal lie in absolute state control as in Germany. The German system is strong where ours is weak, and *vice versa*. The ideal system would be one of limited state control combining the advantages of both.

The German system is not national since each "dominion" retains the right to manage its own schools. But practically the system is uniform in all the dominions. The minister of culture in each dominion appoints the upper educational advisory board, which prescribes all important school regulations. There are also lower district boards whose power is limited chiefly to enforcing the prescriptions of the upper board. The powers of inspectors and superintendents are limited.

The rigidity of such a system dampers progressive teachers and produces uniformity. Private schools are not exempt. The state regulations are, however, conservative. The advantages outweigh the disadvantages. The chief advantage is that every child is assured of an education of a certain standard. The teacher cannot fall below a minimum requirement. German schools are managed by educators, American schools by laymen. German conservatism is philosophical and rational, American irrational. In German schools objective methods have reached a comparatively high stage of development. The German system is strong in maintaining a fixed standard, the American in the independence of the teacher. The ideal system would divest the boards of the power to permit the schools to fall below a certain standard without being deprived of the power to raise the standard.

The state should prescribe: (1) the frame work of the course of study and certain regulations concerning methods of teaching, allowing superintendents and teachers considerable freedom in completing the structure; (2) certain important laws concerning the general management of schools.

1. Laws to prevent the text-book abuse, the hearing of *memoriter* recitations, the method still most commonly employed in the public schools of America, (?) but no longer tolerated in any of the German schools. Munich has excluded from the schools the use of text-books in geography, history, and the natural sciences.

2. Laws compelling the schools to devote a minimum number of hours each week to objective work, to prevent the primary schools from dwindling down to purely mechanical reading, writing, and arithmetic schools. The poorest reading and writing is found where instruction is limited, practically, to the three R's.

3. Teachers should be obliged by law to employ phonics in teaching children to read. In primary schools where phonics are not used the waste of time is enormous. Regulations might be made restricting the use of unscientific methods in teaching spelling and technical grammar, and the use of text-books in geography and history.

Concerning the general management of schools Dr. Rice suggests:

1. Laws prescribing the methods of appointing teachers so that members of boards of education might be restricted in using their positions for purposes of patronage. Qualifications for licenses to teach in city schools might be regulated by the state. 2. The state might insure proper supervision for the city schools, by compelling the employment of an adequate number of superintendents, and by requiring superintendents to meet their teachers a minimum number of times each month for conference on grade work, and instruction in the science of education and methods of teaching.

Finally, there might be a state board of education of five or six educational experts to be permanently maintained by the state. Their duties should be in general to visit schools at home and abroad to become conversant with the doings of educators in all parts of the civilized world in order to secure a scientific basis for action. Specifically their duties should be (1) to deliver pedagogical lectures to teachers in different parts of the state; (2) to inspect schools in order to observe that the state laws are enforced.

O. B. R.

SOME RECENT EDUCATIONAL ARTICLES.

Education for Girls in France. By Katherine de Forest, *Scribner's Magazine*, November, 1893. "Above everything else, a Frenchman insists that his children shall be able to write and speak their own language, not only correctly, but with elegance."

O. B. R.

Spectacled Schoolboys. By Ernest Hart. *Atlantic*, November 1893. A sensible article pointing out that "The more general use of spectacles.... both by children and adults, is mainly the result, not of any increase of eye disease or degeneration of vision," but "is the index of the progress of a new and practical application of physical science to the relief of

a widespread and very ancient series of troubles, arising from defects which have always existed,—but which are now far more readily tested and remedied than they were during the lives of the last and earlier generations."

The Hungry Greeklings. By Emily James Smith. *Ibid.* A study of the Greek as he appeared in the Roman world. The author is known as the translator of a volume of selections from Lucian.

The New Moral Drift in French Education. By Paul Bourget. *The Forum*, November, 1893.

Child-Study: The Basis of Exact Education. By Prest. G. Stanley Hall. *The Forum*, December, 1893.

Winchester College. *The Quarterly Review*, October, 1893.

Religion at the London School Board. By the Hon. E. Lyulph Stanley. *The Nineteenth Century*, November, 1893.

Education and Instruction. An address delivered in the Salt Schools, Shipley, Yorkshire, in June, 1893. By Lord Coleridge. *The Contemporary Review*, December, 1893.

The Strasburg Commemoration. A letter from a Scottish student. *Ibid.*

Das humanistische Gymnasium. Vierter Jahrgang. 1893. Heft III.

Das holländische Gymnasium, von K. Bluemlein, III.

Die Wiener Philologenversammlung

Der revidierte Lehrplan der hessischen Gymnasien

Neuere und neueste Ausserungen über Schulreform, bespr. von G. Uhlig III.

Philologie und Schulreform, von U. von Wilamowitz.

Moellendorf.

Zeitschrift fuer die oesterreichischen Gymnasien Elftes Heft. 10 Nov. 1893. Wien, Carl Gerold's Sohn.

1. Zwei Wiener Handschriften zu Ciceros "De Inventione Von H. Muzik, in Krems.

2. Zur Ermordung des Hipparchos nach Aristoteles.

3. Horace c. II. 15, 17 ff. Von H. Müller in Weissenburg i. E.

4. Zu Caesaris bell. Gall. I. 40, 10, von H. Muzik.

Central Organ fuer die Interessen des Realschulwesens. Heft. XI. 7 Nov. 1893.

Dürfen wir in unseren deutschen Schulen auf Erteilung des Religionsunterrichts verzichten?

Von Oberlehrer Ludwig Rudolph in Berlin.

Zeitschrift fuer die oesterreichischen Gymnasien 8 & 9 Heft, 28 Sept. 1893.
Widersprüche in Kunstdichtungen. Max H. Jellinck. Carl Kraus.

Zeitschrift fuer die oesterreichischen Gymnasien Zehntes Heft. 20 Oct. 1893.

Johann Gabriel Seidl und Carl Gottfried R von Leitner.

Von Anton Schlossar.

Paedagogisches Archiv No. 10. 1 Oct. 1893.

Bericht über die zweite Versammlung des Vereins zur Forderung des Unterrichts in der Mathematik und den Naturwissenschaften in Berlin am 4, 5 und 6 April 1893. (Schluss.)

Central Organ fuer die Interessen des Realschulwesens. Heft X. 7 Oct. 1893.

Die Sage vom Elfen-Arni. Eine isländische Volkssage, aus dem Neuisländischen zum ersten Male ins Deutsche uebertragen von Dr. Heinrich v. Lenk.

Katlas Traum Eine isländische Volkssage aus dem Neuisländischen zum ersten Male ins Deutsche uebertragen von Dr. Heinrich v. Lenk. Heft, IX.

Formal sprachliche Bildung durch den Unterricht in der Mutterprache, Formal logische Bildung durch den Unterricht in der Mathematik, Von Direktor Dr Völcker in Schonebeck a. d. Elbe. (Schluss.)

Paedagogisches Archiv No. 9. 1 Sept., 1893.

Bericht über die zweite Versammlung des Vereins zur Forderung des Unterrichts in der Mathematik und den Naturwissenschaften in Berlin am 4, 5, and 6 April 1893.

Zeitschrift fuer lateinlose hochere Schulen IV, Jahrgang. 12 Heft. Sept. 1893.

Entlastung einzelner Lehrer von der vorgeschriebenen Maximalstundenzahl bei der Berechnung des zu deckenden Unterrichts bedürfnisses des höheren Lehranstalten.

Übersicht über die Entwicklung des Realschulwesens in der Provinz Hessen-Nassau Von Dr. Karl Knabe.

FOREIGN NOTES

The Schoolmaster, September 16, 1893.

STATISTICAL SUMMARY OF 16,094 CHILDREN SEEN, SHOWING NUMBERS PRESENTING EACH DEFECT AND NUMBERS IN CERTAIN GROUPS.

Defect or Group of Children.	Boys.	Girls
Cranial abnormality.....	254	230
External ears.....	108	36
Epicanthis.....	97	66
Palate.....	121	83
Nasal bones.....	39	48
"Other defects in development," including as below.....	70	67
AS ABNORMAL NERVE-SIGNS:		
General balance.....	25	47
Expression.....	50	68
Frontals overacting.....	207	39
Corrugation.....	8	3
Orbicularis oculi relaxed.....	112	101
Eye-movements.....	119	83
Head-balance.....	28	85
Head-balance weak.....	261	167
Hand-balance nervous.....	72	112
Finger-twitches.....	32	41
Lordosis.....	14	35
"Other nerve-signs".....	142	96
GROUPS OF CASES:		
Eye cases.....	212	191
Nutrition low, pale, thin, delicate.....	181	220
Mentally dull in school.....	646	521
"Exceptional pupils," including as below.....	69	57
Children maimed or paralysed.....	30	35
Children with history of "fits" during school life.....	16	18
Imbeciles and idiots.....	3	3
Children mentally exceptional.....	1	
Children "feebley gifted mental'y".....	33	35

AMERICA.

The Journal of Education, (London,) Dec. 1, 1893.

Senator Peffer, of Kansas, has introduced into the United States senate a bill for the creation of a national department of education, in charge of a secretary, who is to take rank with the secretaries of war, the navy, &c. Another cabinet officer would not be at all superfluous, and the cause of education deserves such national recognition. The magnitude of the interests involved is shown by the fact that there are enrolled in the public schools of the United States 12,699,196 pupils. The average daily attendance is 8,004,275. The attendant expense varies from 1,107,-970 dollars in Mississippi to 17,543,880 dollars in New York. From Chicago statistics we gather some interesting particulars as to the ages of pupils at the date of their first enrolment. In the year 1891-92, 14.7 per cent. were under the age of seven; 72.2 per cent. had passed their eleventh year; 15 per cent. were over seventeen. We fear that some headmasters would look askance at the 2,367 students who sought admission to school at this somewhat mature age. The movement for University extension continues to grow apace, and at least two monthly journals are issued in

connexion with it. Equally satisfactory is the news that attempts to supply free textbooks in schools have proved successful. The plan is being generally adopted in Pennsylvania, Pittsburg being the only place where it is opposed.

AMERICAN EDUCATIONAL ENTHUSIASM.

Professor Ripper, principal of the Sheffield Technical school, has given his views on American education, to an interviewer, after a visit to the World's Fair. What struck him most was the universal enthusiasm for education. State vied with state in educational exhibits, and the universities were as keen to put themselves *en evidence* as the common schools. It is satisfactory to hear that, in Professor Ripper's opinion, England is still distinctly ahead of America in its provision for the education of the mechanical engineer. But the efforts and sacrifices of the American citizen to avail himself of the higher education throw into the shade all the achievements of our University extensionists. While staying at the Chicago university, Professor Ripper found that many of the waiters at table were university students, some of them holding high degrees. The same was the case with the lady waiters at the Exhibition, and even among the city lamplighters and newspaper sellers several were found to be working for a degree.

GERMANY.

Idleness and Dissipation.—Dr. Schmoller, professor of political economy at Berlin, has been following the example of Professor Mommsen in inveighing against the idleness and dissipation of German students in the earlier years of their university course. Speaking not without knowledge, I venture to say that the amount of work done by the most frivolous will compare favourably with the labours of the average poll man at Cambridge.

HILFSSCHULE.

From Hanover comes a satisfactory report of the progress of the *Hilfsschule*, opened at Easter, 1892. The fundamental idea of the school was to provide special teaching for children of less than normal capacity. The increase has been from 89 pupils at the outset to 127 at the time the report was published. At the entrance examination the intellectual condition of the children, most of whom had been taken from the *Burgerschulen*, was found to be deplorable. Such knowledge as they had acquired was vague and chaotic; the majority could neither read nor write; only two were familiar with numbers beyond ten, and the arithmetical teaching had to begin in every class from one. The result of the year's work has surpassed all expectation. Those in the upper classes can now read fluently and write legibly. In religion they can answer questions on set passages of Scripture without hesitation, and some can relate the matter continuously and quote texts. Most schoolmasters are confronted from time to time with pupils seemingly unteachable, and this experiment of grouping such children apart may find approval. As

to the means by which the good work was achieved, more details may be desired. I gather that those who suffered from defects in the power of speech were separated until the defects were remedied. Every lesson was followed by an interval of ten minutes. Afternoon lessons were avoided; the classes were made as small as possible; and attention was paid to health and cleanliness. There is nothing very novel here, and it would appear that personal tact on the part of the teachers was the most efficient instrument employed. An obvious objection to the scheme is that a certain stigma may attach, however unjustly, to the pupils of such a school.

MANUAL LABOR.

The cause of manual work, which, in spite of the statement of the speaker of the house of commons, makes good progress everywhere, receives in Germany increasing support. In the district of Minden special courses are being given for mistresses in *Volksschulen*. The number of those who attend varies from twenty to twenty-four. It would be interesting to know how many schoolmistresses in England are receiving technical instruction of the same kind. In Berlin, the pupils in the schools for *Handfertigkeitsunterricht* numbered 192 in 1887 and 886 last year; whilst the Leipzig *Lehrerbildungsanstalt*, which opened in 1884 with 30 students, now has 151, and has outgrown its buildings. Nor can it be said that the growth is due to artificial fostering. To the Berlin schools the State contributes 2,000 M., the town 1,800 M., the total annual grant being thus about 4s. 3d. for each scholar taught. It will be remembered that the English grant is 6s. if the teaching is fairly good, or 7s. if excellent.

ELEMENTARY EDUCATION.

The sixteenth annual meeting of the Society of Elementary Teachers in Hanover was attended by more than a thousand members. Herr Grabbe, of Minden, delivered an address, on the best means of preventing the results of the education given in elementary schools from being lost. He contended that the idea of compelling pupils of such schools to attend up to their sixteenth year was impracticable. Apprentices now learned little from their masters, and factory hands were still worse off. Attendance at the continuation schools should be made obligatory on boys up to their eighteenth, or girls up to their seventeenth year. These schools must be free; and the six hours a week which they require (or from girls four) should be taken from the hours of work and not from the leisure time of the pupils. That these proposals are feasible was shown by a comparison of the regulations which prevail in other States. Herr Schuettler, of Hanover, read an interesting paper on the time during which boys should remain under one master. He urged that it should be for their full school course. The teacher would thus learn to know the capacity of his pupils, and the power of character to mould character would have free play. The system would be perfect if the master kept his boys for the eight years of their school life; but it would be a gain if

he had them for three years instead of, as now, for one. Dr. Wehrhahn, inspector of schools, professed himself to a certain extent in favour of the system advocated by Herr Schuettler, but believed that it was not suitable for every school, nor in the case of every teacher. Surely there would be great danger of one-sidedness in the development both of mind and character under such a scheme of education.

DECREASE OF CANDIDATES.

The number of candidates for masterships in higher schools is slowly decreasing. Where there were 596 in 1885, there are now 260. Frequent warnings that the scholastic profession is overcrowded have had their effect. Nevertheless, it seems that there are still 1,800 qualified candidates seeking State employment in Prussia. Vacancies occur at the average rate of 220 a year. Thus, some of the applicants must wait eight years before obtaining an appointment. Even if they are engaged as *Hilfslehrer*, the time spent in that capacity is not reckoned in the years of service which confer a right to a pension. The German schoolmaster has, however, the comfort of knowing that when once *definitiv*, he is secure in his office, and that his salary, if small, is progressive.

ANTI-SEMITISMUS.

Anti-Semitismus is still rampant. It has been frequently alleged by a certain section of the German press that books are used in Jewish schools which contain doctrines which are immoral and subversive of the present constitution of society. By order of the Prussian minister of education an examination of the books in question has been made. The result is to show that such allegations are absolutely without foundation.

FRANCE, LA LOI VIGER.

The full text of the law of the 25th of July, 1893, is now to hand. The new enactment, modifying the law of 1889, effects a material improvement in the position of the teachers in primary schools. The chief gain is in regard to the percentage of teachers included in the higher classes. The rate of promotion to higher classes is accelerated. Advance: ent now depends upon seniority and merit, and the new law lays down the proportional weight to be given to the two claims.

ITALY.

The Italian minister of public education has appointed a commission to study the question of a national system of physical education. The commission held its first meeting on the 26th of September. It is anticipated that its labours will be of long duration.

O. B. R.

PUBLICATIONS RECEIVED

PEDAGOGICS.

ALBANY HIGH SCHOOL: Twenty-fifth Annual Report of the Albany High School. (Year Ending August 31, 1893.) Published by the Board of Public Instruction. Size $5\frac{1}{2} \times 9\frac{1}{4}$ in. pp. 88. Charles Van Beuthuysen & Sons.

EDWARDS: See Ely.

ELY: Addresses Delivered at the 31st University Convocation, Senate Chamber, Albany, N. Y., July, 1893. The Universities and the Churches, by Prof. Richard Ely, University of Wisconsin. Educational Legislation, by Senator James T. Edwards; Prin. McDonough School, Baltimore, Md.; Higher Education and the State, by Regent Charles E. Fitch; World's Recent Progress in Education, by Prin. James E. Russell, Cascadilla School, Ithaca. University of the State of New York, 1893.

FITCH: See Ely.

HINSDALE: International Education Series. How to Study and Teach History. With Particular Reference to the History of the United States. By B. A. Hinsdale, Ph. D., LL. D., Professor of the Science and the Art of Teaching in the University of Michigan. Size $5\frac{1}{2} \times 7\frac{1}{4}$ in. pp. xxii-346. D. Appleton & Co.

HOLLANDER: See Adams.

MONROE: Pacific Educational Journal Reprint No. 1. Examinations and Promotions in the Schools of California. Will S. Monroe, Palo Alto, Cal. Size $6 \times 8\frac{1}{4}$ in. pp. 18. Philip M. Fisher, Educational Publishing Co., Oakland, Cal.

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